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NEWS SUMMARY

GENERAL

Hospital names heart patient

Britain's latest heart transplant patient—the sixth—was named as Mr. Keith Castle, 52, retired builder, of Latchmere Road, Battersea, London.

On the first day after his 5½-hour operation at Papworth Hospital, near Cambridge, he had a 30-minute visit from relatives. He spent most of the rest of the day dozing and listening to the radio.

Hospital officials said everyone there was "very delighted" with Mr. Castle's progress. Though lying flat on his back, he is breathing normally without a ventilator and began his post-operation morning with a large glass of milk.

Strauss fails to budge Begin

President Carter's Middle East envoy Robert Strauss failed to budge Israel's Prime Minister Menahem Begin on his rejection of any U.S. attempt to introduce a new UN resoluton recognising Palestinian rights.

After two hours of apparently tough talks in Tel Aviv, Mr. Strauss refused to make any reference to Israeli threats to quit Palestinian autonomy talks if the U.S. tabled its own resolution or backed any other resolution widening Palestinian rights. Back Page

Crucial vote

The trade union vote may yet thwart Mr. James Callaghan's hopes of preventing the Labour Party conference in October deciding on controversial amendments to the party's constitution. Many union leaders now believe the debate should not be sidestepped. Back Page

Spacemen back

Soviet cosmonauts Vladimir Lyakhov and Valery Ryumin returned safely to earth aboard Soyuz-34 after orbiting the earth in the Sulyut-6 space station for a record 175 days.

Death sentences

Former Kampuchean leaders Pol Pot and Ieng Sary were found guilty of genocide and sentenced to death in their absence by a Phnom Penh special court. They were described as "the authors" of the deaths of about three million people in their three-year rule. Page 2

Jacklin wins

Britain's Tony Jacklin returned a final round of 71 to win the West German open golf championship at Frankfurt. He finished two strokes ahead of American Lanny Wadkins to capture the $12,500 prize.

Dictator caught

Equatorial Guinea's ousted dictator, Francisco Macais Nguema, was captured alone and unarmed in the jungle near his native village. Troops of the military council which overthrew him are taking him to the city of Bata for trial.

Muzorewa sued

The commander of Zimbabwe Rhodesia's crack Selous Scouts battalion, Lt.-Col. Ron Reid-Daly, is suing Prime Minister Abel Muzorewa and the former Army commander over the alleged bugging of his telephone. He is seeking $78,000 damages for invasion of privacy.

Briefly . . .

Urban guerrilla suspect Franco Piperno, sought in Italy over the killing of former Premier Aldo Moro, arrested in Paris.

Three surviving babies of octuplets born in Naples reported in slightly improved condition.

BUSINESS

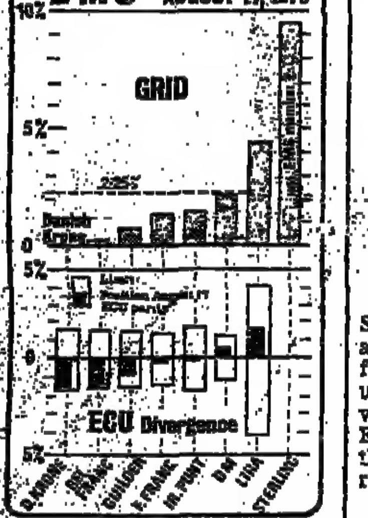
Phillips may build biggest oil system

THE PHILLIPS offshore consortium is preparing the way for developing three neighbouring oil fields which could become one of the biggest oil and gas production systems in the UK sector of the North Sea.

The decision to go ahead has still to be taken by Phillips and its partners. The fields concerned are Tiffany, Toni and Thelma in the so-called "T-block" 16/17, about 150 miles north-east of Aberdeen. Back Page

● THE DANISH krone remained the weakest member of the European Monetary System last week, although most currencies were fairly steady and trading was quiet. Attention tended to centre around the U.S. dollar in the foreign exchange market and the upward trend in U.S. interest rates.

There was no sign of any heavy pressure on the Danish currency, or the other weak member of the EMS, the Belgian franc. Belgium's inflation rate rose to 4.93 per cent for August, confirming the upward trend in other industrial economies. The Italian lira remained the most improved member of the EMS followed by the D-mark.



The chart shows the two constraints on exchange rates within the European Monetary System; the "grid" of cross rates from which no currency (except the lira) may more more than 2¼ per cent; and the varying degrees by which each currency may diverge from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies. The "grid" is always shown by reference to the weakest currency in the system, which is the base line in the top chart.

● EEC AUDITING office has urged clearer rules for expenditure by top men at the Brussels Commission, and noted that other Community bodies may also need firmer spending guidelines. Back Page

● THE OFFER of Merck of the U.S., via its wholly-owned UK subsidiary, for Alginate Industries is unaffected by Friday's U.S. Justice Department anti-trust suit, it was said yesterday.

● WOOL TEXTILE group Illingworth Morris is to close one of its fine worsted mills in Huddersfield with a loss of 350 jobs because of falling demand. Page 3

● WILSON COMMITTEE finding that there is no "systematic bias" against small firms in the UK financial system is rejected by the Association of Independent Businessmen. Pages 3 and 7

● ENGINEERING workers at BL's Rover car plant in Cardiff have voted to stay out after today's one-day national strike, following management decision to lay off workers.

Economic activity in UK may be starting downturn

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

Economic activity in the UK may be starting to turn down from the buoyant levels of early summer. The latest Confederation of British Industry trends inquiry shows a marked deterioration over the past two months in the outlook for manufacturing industry's orders and output.

The inquiry, results of which are published this morning, *points particularly* to a weakening in export order books compared with earlier in the year.

More companies report adequate or more than adequate stocks of finished goods, which reflects lower than expected demand at home and abroad.

Consequently, expectations about the volume of output over the next four months have become much less buoyant

The findings provide the first firm indication of the way in which the economy is moving. CBI economists say they suggest that a turning point has occurred.

Hitherto, the evidence has been less clear. The labour *market* has been tight, especially in the South-East, and total output, measured by real Gross Domestic Product, grew by 3 per cent in the April-June period.

That, however, largely represented rising North Sea oil production and a recovery from the depressed levels of the winter when bad weather and strikes reduced activity.

The consumer boom that preceded the rise in value added tax has made it difficult to draw conclusions from the fall in retail sales last month and the slowdown in the growth of bank lending.

The CBI's quarterly trends survey in July gave a warning that the outlook for orders and output had become much less encouraging, but the supporting evidence then was tentative.

The latest findings show that the earlier trend has become firmly established and that prospects have deteriorated noticeably in the past month. The inquiry was conducted in the first fortnight of this month and covered 1,837 manufacturing companies.

The balance of companies reporting total order books below rather than above normal has increased from 4 to 12 per cent in July and 18 per cent this month. The slackening in demand is widespread, although producers of consumer goods are in a stronger position than those in capital and intermediate goods.

The weakening in export demand reflects the cumulative impact of the rise in sterling and a slowdown in the growth of world trade.

The balance of those reporting below, rather than above normal export order books has risen from 10 to 28 per cent in the past two months. The change has been most noticeable for companies employing fewer than 200 workers and for consumer goods industries.

The inflation outlook does not, however, appear to have deteriorated further, as the proportion of companies expecting to raise their average domestic selling prices is at the same high levels as for the past few months.

The CBI's pessimism is supported by the latest monthly economic report from the London Chamber of Commerce and Industry, which says that British industry faces "a grim 12 months."

The Chamber says the Government is taking grave risks with industry facing tough monetary constraint, a profit squeeze, rising costs and an overvalued pound, and some export-led companies might go bankrupt.

"While the attempt by the present Government to squeeze inflation out of the system is highly commendable, their policy of strict monetary orthodoxy is now in danger of turning into a straitjacket."

Consumer confidence survey Page 16

Strong pound hits engineers' exports

By Hazel Duffy, Industrial Correspondent

THE STRONG pound's adverse effects on UK manufacturers' international competitiveness is demonstrated in a report today on the short-term outlook for mechanical engineering.

Between 1976 and mid-July 1979, it shows UK machinery export prices have risen approximately 44 per cent against U.S. prices, 41 per cent against Japanese prices and 16 per cent against West German prices.

The report, from an industry working party which includes representatives of employers, trades unions and the Government, predicts a "disturbing" picture for the industry over the next 18 months.

It points out that the Government's budgetary measurers will be effective only in the medium-to-long term.

Meanwhile, the industry faces the problems brought about by the worldwide oil upheaval, while at home investment is expected to fall off in the latter half of this year, and through 1980, causing a steep fall in orders for engineering products.

The industry traditionally relies on a fairly high level of exports to survive. Last year, exports accounted for 42 per cent of the industry's sales.

But its declining international competitiveness has led to this figure being stable for only the past four years even though world demand for engineering products has grown annually.

The report emphasises that the strength of sterling is not the only factor influencing international price competitiveness. But in the other two—the rate of inflation and the rate of productivity growth—the industry has fared worse than most of its competitors.

These factors should have been enough to have ensured a gradual depreciation of sterling. Instead, there has been the recent strengthening of the currency reflecting the UK's oil resources.

While the strength of sterling may prove only temporary, the report warns that there may well be some engineering products requiring a relatively low level of skill which will face growing competition from the newly industrialising countries in the 1980s.

Iran forces mobilised against Kurds

BY ANDREW WHITLEY IN TEHRAN

THE IRANIAN authorities yesterday ordered a general mobilisation to meet further trouble in Kurdistan in the wake of the lifting of the siege of the border town of Paveh by militant Kurds, and banned the region's main political organisation, the Kurdistan Democratic Party.

Popular emotions are reaching near civil-war hysteria, and volunteers are reported by the state radio to be coming forward to fight the Kurds.

In a dramatic interruption of its main news transmission yesterday, the radio broadcast a message from Ayatollah Khomeini, the country's religious leader and unofficial Head of State, calling on all security forces to combat what it described as another "very critical situation" in the provincial capital of Sanandaj.

Rulers

Meanwhile, in Tehran, the Council of Experts to examine the country's draft constitution formally opened yesterday. In an eve-of-session address to the delegates, Ayatollah Khomeini said that, if Iran's new rulers had behaved like other revolutionaries, "and killed a few thousand of the evil ones immediately, there would be no problems now."

Over the next month, the clergy-dominated assembly is expected to revise substantially the present draft, to make it into a more thorough-going Islamic document. The Ayatollah warned the delegates in a message read out at the opening ceremony that they would be betraying their electors if "even one article is not Islamic."

He attacked the pro-autonomy KDP in exceptionally violent terms. Sheikh Ezzedin Hosseini, the popular Kurdish religious leader, was said to be "seditious," and both he and Dr. Abdurrahma Cassemlou, the KDP's secretary-general should be punished, the Ayatollah said.

Mr. Rashid Shakiba, the Kurdistan provincial governor-general, yesterday denied that there had been any disdurbances in Sanandaj warranting the despatch of central Government forces. He denied the state radio's claims that army vehicles and personnel had been attacked, and that women had been taken hostage by the Kurds.

There was no truth either in the reports that the Sanandaj army base was under attack, he claimed, asking: "Why hasn't the Government asked me what is going on?"

The governor-general's comments and other independent statements that this important provincial city is calm suggests that a scare may be being deliberately manufactured to justify sending army reinforcements to Kurdistan.

Mr. Shakiba said the only incident in Sandaj yesterday had been the disarming of a busload of what he described as "irresponsible youths" by local people.

In contrast, Dr. Qassemlou yesterday appealed to world leaders to save the Kurdish people from "genocide." In an open letter, he said full-scale war was under way in Kurdistan, a fate he believed also intended for all the other non-Persian peoples of Iran.

The letter said a "black religious dictatorship of a medieval kind" was being established in Iran. The radio and television broadcasts were the "cry of fanatical Shi'ism" for the massacre of Kurds.

Dr. Qassemlou asked foreign statesmen, including President Jimmy Carter of the U.S., and Mrs. Margaret Thatcher, to intervene to prevent "the total annihilation of the Kurdish people."

In other major developments:

● Oil installations and pipelines in the south-west of the country came under automatic weapons fire on Saturday, according to Pars yesterday. No damage was said to have been caused, and the unidentified assailants escaped.

The attack followed a series of bomb explosions last Thursday on bridges and other vital communications points not far from the main Arab-Iranian towns of Abadan and Khorramshahr.

● The remaining Left-wing daily newspaper, Peygham-e-Emrouz, was formally banned yesterday. Nine other publications were said to be under investigation with a view to being closed.

● Revolutionary guards yesterday attempted to take over the Tehran headquarters of the Mujaheddin-e-Khalq guerrillas, a powerful and well-armed Islamic radical organisation. The attack was temporarily blocked, pending the outcome of negotiations involving the Tehran clergyman, Ayatollah Taleghani. A similar attempt made last week without official backing failed.

Engineering employers sceptical on union curbs

BY CHRISTIAN TYLER, LABOUR EDITOR

SERIOUS RESERVATIONS about the Government's plans for legislative curbs on trade union behaviour have been voiced by the Engineering Employers' Federation, one of the most influential industrial relations bodies in industry.

The federation declares itself sceptical of the value of further legal remedies for closed-shop problems, especially that of the worker who objects to joining a trade union.

It urges the Government not to restrict general immunity of trade unions from prosecution when they take industrial action, at least until statutory curbs on "secondary picketing" alone have been tried out.

These views are in papers, not yet published, sent to the Department of Employment at the weekend. They will be seen by Mr. James Prior, the Employment Secretary, when he returns from holiday tomorrow on the eve of talks with TUC leaders on his consultative document.

The federation raises a number of the same objections to the plans as the TUC. Though its suspicion of the closed-shop reforms is unlikely to sway the Government from reintroducing the legal category of "conscientious objector," its advice about union immunities could be decisive.

There are already signs that the option of making all trade union branches of commercial contracts vulnerable to court action, an option favoured by senior Conservative lawyers, may be quietly dropped.

The TUC claims that this change would outlaw all forms of industrial action, whether first-hand or "secondary," and virtually remove the right to strike.

The engineering employers are considerably less hawkish about the plans than the Confederation of British Industry, partly because the federation leaders feel it would be at the sharp end of the legislation. If their plea for caution is ignored, they will try to have the Bill changed as it goes through Parliament.

A paper by the federation's management board says that "on balance" legislation should be confined at present to the narrow issue of "secondary" picketing.

But it adds: "Certain actions by shop stewards in the current national dispute, in threatening to interfere with commercial contracts—in the form of blacking of sub-contractors—have tended to harden employer opinion in favour of a more fundamental change in the law."

If such interference were to become a regular weapon, there would then be a strong case for reverting, as the Government suggests, to the 1974 position, when immunity was restricted to breaches of employment contracts only.

Even a revision of picketing rules and immunities, it says, could throw up many practical difficulties, for instance, how to define the "place of work."

"It is probable that no amendment of the law can guarantee that practical problems can easily be overcome, perhaps even in a

Continued on Back Page

Unions seek tougher TUC line. Back Page

Venezuela to revise almost all oil supply contracts next year

BY RAYMOND WHITAKER IN CARACAS

VENEZUELA, the sixth largest oil producer in the Organisation of Petroleum Exporting Countries, plans a wide revision of almost all its oil-supply contracts next year.

Several features of its proposals are new to OPEC and might set a precedent in the organisation.

Contracts for all the country's oil exports, except about 100,000 barrels a day, are to expire on December 31. Venezuela exported 2.1m of its 2.4m barrels-a-day total production in the first three months of this year.

Sr. Alirio Parra, international marketing director of Petroleos de Venezuela, the State oil monopoly, said that the simultaneous expiry of so many contracts had given the country a unique opportunity to decide future strategy.

The main features of the new contracts will be-

● A reduction in the proportion of crude sold to the big oil companies, which buy nearly three-fifths of Venezuela's exports, and a search for new markets, with attempts to sell more oil directly to consumers;

● Contracts will run for shorter periods, and notice of price increases will be reduced from 30 days to between three and five days. "Contractual tolerances," permitting buyers to accept up to 10 per cent more or less than contracted for, will be practically eliminated;

● Higher exports of heavy crude, abundant in Venezuela, and a switch in the country's refineries to exports of distillates from scarcer light and medium crude, which will increase revenues in the short term.

The last part of that strategy depends heavily on the fuel oil shortage in the U.S., which buys slightly more than a third of Venezuelan crude exports.

If the shortage is alleviated by a mild winter or early success for President Jimmy Carter's conservation proposals, Venezuela's marketing plans will be thrown off course.

Sr. Parra said Venezuela will be able to maintain present production levels of light and medium crude for two years. In the first quarter of this year, 828,000 barrels a day of light and 805,000 of medium were extracted, while heavy crude output was 711,000 barrels a day.

Exports of heavy crude will be increased to about 750,000 barrels a day next year and about 900,000 in 1981. Venezuela's light crude reserves constitute only a fifth of the country's 18bn barrels of proven reserves.

Sr. Parra said that the country wanted to diversify its markets, but emphasised that the reduction in sales to big companies would not be disruptive.

Petroleos de Venezuela expects the upward pressures on oil prices to continue in 1980. Efforts to sell directly to consumers such as North American power companies will be intensified, possibly involving taking equity stakes in such companies in exchange for oil.

Sr. Parra said the study had taken into account Venezuela's obligations to neighbouring South American countries, but added that Venezuela did not want to be the sole oil supplier to any country.

On prices, he said Venezuela wanted more flexibility within the OPEC framework, so that producing countries could react more quickly to market conditions.

Although Venezuela's output is considerably less than that of producers such as Saudi Arabia, Iran and Iraq, its greater experience in marketing means that it often leads the way for other OPEC countries.

Sr. Humberto Calderon Berti, the Venezuelan oil minister, said he would seek a broader policy on price increases when the OPEC oil ministers meet in Caracas in December.

Sr. Berti wants to expand OPEC's role beyond that of a price-fixing cartel and would like the organisation to promise the industrialised countries a long-term price structure in return for greater concessions in the north-south dialogue.

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Major EEC energy user pessimistic on savings

By Kevin Done

THE EUROPEAN chemical industry, which consumes nearly a fifth of the energy used by EEC industry, is pessimistic about its ability to cut consumption significantly over the next eight years.

Significant savings have been made in the last decade, but the industry is forecasting a reduction of less than 1 per cent a year in 1978-87.

In 1973-77, the EEC's six main chemicals producing countries cut their energy use—measured by the amount of energy used per unit of production—by about 5 per cent.

The Dutch industry has had most success. By 1977, it was using only 77 per cent of the energy needed in 1970 to manufacture each tonne of product. By 1987 this is forecast to drop to 71 per cent of the 1970 level, making Holland still the most efficient energy consumer.

A report by the European Chemical Industry Federation says the industry as a whole cut energy use per unit of output by 16 per cent in 1970-71.

By 1982, it is forecast to be using 20 per cent less energy than in 1970, with a further fall to only 76 per cent of the 1970 level by 1987.

The federation expects EEC chemicals output to grow by 4 per cent a year in 1977-82, and by 3.7 per cent a year in the five years to 1987. Growth averaged 3.7 per cent a year from 1972-77.

The Belgian industry made least progress in 1970-77, with a reduction of energy consumption of only 6.5 per cent. It was followed by France (14.4 per cent), West Germany (16.2 per cent), the UK (16.4 per cent), Italy (18 per cent), and Holland (22.8).

In 1977, the EEC chemicals sector consumed 78.7m tonnes of coal equivalent as energy, and 79m tonnes of coal equivalent as feedstock.

Most potential savings have already been made by scaling up the size of plant; the recovery of waste heat has already been pushed to a high level; and the need for greater environmental protection leads to higher energy consumption.

Forest fires break out again in France

Emergency precautions were in force throughout the French Mediterranean region yesterday, after forest fires broke out again. The fires have already destroyed over 65,000 acres, David White reports from Toulon.

Two people, believed to be naval firemen, died on Saturday as campers and bather were evacuated by boat from rocky inlet near Marseilles.

Tanzania rations fuel

Tanzania, suffering its worst economic crisis in years, has announced strict petrol rationing, our Dar-Es-Salaam correspondent writes. All filling stations will close from Thursday evening until Monday morning, except a few to supply taxis and long-distance lorries. Car owners are to be rationed to 13 gallons a week.

Sudan Cabinet change

President Jaafar Nimairi has removed seven ministers and two top advisers, and brought the leader of the Moslem Brotherhood into his Cabinet, AP reports from Khartoum. The reshuffle came after government attempts to end food and fuel subsidie led to 10 days of rioting earlier this month.

Prague delays trial

Czechoslovakia is apparently delaying the trial of 10 civil rights activists to avoid it coinciding with the anniversary of the 1968 Soviet-led invasion, on August 21, AP reports from Vienna.

Chad accord reached

African Foreign Ministers in search of a solution to the Chad civil war have agreed on a general ceasefire and the dissolution of the Government of National Union in N'Djamena, according to Lagos Radio, Reuter reports. Representatives of Chad's warring factions attending the meeting in Lagos agreed to form a coalition Government, the Radio said.

Mrs. Gandhi holds the key in confidence debate

BY K. K. SHARMA IN NEW DELHI

MRS. INDIRA GANDHI, considered a spent force in Indian politics until three weeks ago, has at her mercy the fate of Prime Minister Charan Singh's shaky 22-day-old Government.

In the vote of confidence debate which is due to open today in the Lok Sabha (Lower House of Parliament), the way in which Mrs. Gandhi directs the 73 members of her Congress (Indira) faction will be crucial. If she orders them to vote against Mr. Charan Singh's Janata (Secular) Congress coalition, it is almost certain to fall.

Aware of the importance that she has suddenly acquired, Mrs. Gandhi is holding her cards close to her chest. It is unlikely that her decision will be known until the vote takes place.

While the vote of confidence debate begins today, the vote itself may not be held until Wednesday, since discussion on the Prime Minister's motion is expected to last 15 hours.

Without support from Mrs. Gandhi's Congress faction, Mr. Singh cannot hope for more than 238 votes, which is 30 votes short of the 268 votes needed to survive.

Mr. Jagjivan Ram, the Harijan (Untouchable) leader of the Janata opposition party, faces a similar predicament. He is staking a claim for Premiership on the grounds that he leads the largest single party in the Lok Sabha, with 204 members. Success for Mr. Ram would also be conditional upon support from Mrs. Gandhi.

Mrs. Indira Gandhi

Both Mrs. Gandhi and Mr. Singh have bitterly attacked Mr. Ram's Janata Party as sectarian and opposed to the interests of the country's minorities and poor—which each party claims to represent.

Mrs. Gandhi is violently opposed to Mr. Ram, who was once in her Cabinet but deserted her just before the 1977 General Election, thus contributing to her defeat.

Mr. Charan Singh has gone out of his way to find places in his Cabinet for Muslims, Christians, and Harijans during the trading for support in this week's vote.

He hastily drew up a 27-point programme which was unveiled on Saturday and reads more like an election manifesto than a programme of action.

The seven-page statement has fuelled speculation that a mid-term election is close. Many believe that Mrs. Gandhi wants an early election. She is probably the only Indian politician who stands to gain by dissolution of the 28-month-old Lok Sabha.

A recent poll shows that 64 per cent of the Indian people feel the country was better off during Mrs. Gandhi's emergency rule, and 75 per cent want a mid-term election. As many as 48 per cent of the people want Mrs. Gandhi back as Prime Minister, since many feel that India's patchwork coalition is more concerned with hanging on to power than governing. Mrs. Gandhi will undoubtedly try to cash in on the popular disgust at the current political horsetrading.

Lloyds angers Gulf insurers

BY OUR FOREIGN STAFF

GULF INSURANCE agents met in Baghdad over the weekend to discuss how they might retaliate against the Lloyds Insurance underwriters decision to apply "war risk" premiums to shipping in the Gulf area.

In Bahrain, Mr. Emro Al-Kais, an executive of Al-Ahlia Insurance Company, said Gulf interests could retaliate by boycotting the London market and setting up a re-insurance underwriters' market to handle shipping insurance. A local newspaper called the war risk premiums "blackmail."

Mr. Abdel-Aziz Al-Saqr, chairman of Kuwait's Chamber of Commerce and Industry, said in an interview with the Kuwaiti News Agency that Gulf States should impose a premium on crude oil exports. The premium would be to cover "risks of threats, rumours and rumourmongers." He did not specify the size of the premium he had in mind.

It is likely that Gulf insurers will send a delegation to London with the aim of persuading Lloyds to revoke its ruling.

Lloyds' decision to raise insurance on the hulls of vessels operating in the Gulf took effect on Tuesday last week. Lloyds justified its action on the grounds of prolonged and apparently continuing hostilities in the area.

Slower Irish growth forecast

BY ROBERT MAUTHNER IN PARIS

IRELAND'S GROWTH will be substantially slower in 1979 than last year, its inflation much higher, and its current account deficit likely to triple, according to the annual review of the Irish economy published by the Organisation for Economic Cooperation and Development (OECD) today.

Ireland's ambitious development programme, adopted in mid-1977, led to it having the fastest-growing economy in the OECD over the past two years, with real gross domestic products (GDP) rising by 5.5 per cent in 1977, and as much as 7 per cent last year. This was a remarkable achievement in a slow-growing international environment, the OECD says.

However, as a result of the tightening of monetary policy and the withdrawal of some of the previous fiscal stimulous, prospects are much less bright from this year. The phasing-out of tax incentives is expected to moderate the growth of disposable incomes.

In 1979, GDP is expected to increase by 4 per cent, still high by OECD standards, but much lower than the 1978 rise of 7 per cent. With imports rising by 10.5 per cent in volume, compared with 8.5 per cent for exports, and import prices expected to increase by as much as 12 per cent, compared with only 8 per cent for export prices, the payments deficit is expected to widen to I£450m (£413.8m), from only I£150m in 1978.

The OECD Secretariat points out that a temporary increase in the payments deficit was expected under the national development programme, but that the programme could not have foreseen the effect of higher oil prices, estimated at about I£95m in 1979.

Stewart Dalby adds from Dublin: The Irish Government has given no official figure for inflation, but ministers will admit in private that it is probably running at 12-15 per cent.

Mr. Martin O'Donoghue, the Minister for Economic Planning and Development, seemed relatively cheered by the gist of the OECD report. He said: "It shows that relatively speaking the Irish economy is doing well." He added: "Just how well we actually do depends on our own performance at home. And if we repeat the series of strikes of the first half of this year we will be in poor shape as we go into the 1980s."

Tanker owner Reksten on trial

BY FAY GJESTER IN OSLO

MR. HILMAR REKSTEN, the Norwegian tanker magnate, goes on trial in Bergen today for a long list of alleged tax and currency offences most of them involving shipping companies outside Norway. The substance of the charges is that profits from lucrative tanker deals early in the 1970s were channelled to companies registered in tax haven countries, thus enabling Reksten to evade several hundred million kroner in tax.

The 81-year-old ship owner, who is in poor health, has warned the authorities that although he will attend the trial in Bergen's municipal court, he will remain silent. He intends to save his strength and his arguments for the inevitable subsequent hearing in a higher court, where the verdict will be pronounced not by a judge but by a jury.

Reksten's defence counsel is also expected to stay silent during the trial for which the prosecution has called 33 witnesses many of them from abroad.

Today's case has taken three years to prepare. A Bergen court indicted Reksten on tax and currency charges in June 1976 following accusations by the Bank of Norway and the Inland Revenue.

The court previously refused to give police access to a file which lists the Reksten family assets all over the world — a document which the Norwegian Press has christened the "black book."

The case against Hilmar Reksten has political overtones. His shipping companies in Norway which have been losing money all through the tanker slump are big borrowers from Hambros Bank of London. These loans have been guaranteed by the state-backed Norwegian guarantee institute. Critics in Norway's left wing Press have complained that taxpayers' money may have to be spent to rescue Reksten companies while the Reksten family itself probably has extensive secret assets abroad.

MENACE, MYTH OR MAGIC FORMULA?

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Colony cuts loan growth

BY PHILIP BOWRING IN HONG KONG

BOWING TO pressure from a worried government, Hong Kong's Exchange Banks Association, the cartel of leading banks, announced on Saturday another 1.5 per cent increase in the prime lending rate to a new record of 14.5 per cent. Deposits rates were increased by similar amounts so they now range from 9.25 per cent for three months and savings deposits to 12.5 per cent for 12 months. The association said that it was responding to both market and monetary conditions. It noted the recent increase in interest rates worldwide. However the extent of the rise indicated an attempt at shock tactics to deter loan growth. Credit has grown at over 46 per cent over the past year.

Despite a succession of interest rate rises taking prime from only 6 per cent a year ago and government appeals for slower loan growth, June figures showed lending still growing at an annual rate of about 36 per cent. Critics have accused the banks of moving very belatedly, both to raise interest rates—the last rise was in April—and continuing to grant big loan increases.

Whether the new rate rises will bring a rapid reduction in credit growth remains to be seen. There is a feeling that it will dampen spending on consumer durables, but the banks are already overcommitted to loans to the building and property sectors so may continue lending to increase lending to meet these commitments. At the same time property developers and home buyers are unlikely to be prepared to leave buildings uncompleted.

The interest rate rise is likely to cause the HK dollar, which had been firm in anticipation of an increase to recover further but the stock market is likely to see an abrubt end to its recent indian summer. Hong Kong now faces both record interest rates and a weakening export outlook.

WORLD TEXTILES

Italy reacts against French imports curb

BY ROBERT MAUTHNER IN PARIS

THE ITALIAN Government intends to lodge a complaint with the EEC Commission in Brussels regarding the recent decision by France requiring importers of sweaters to apply for authorisation before bringing the goods they have purchased into the country.

This was stated by Sig. Guido Artom, the president of the Italian Textile Industry Federation, in an interview with the French economic newspaper Les Echos, in which he also expressed the opinion that the Italian Government would take reprisals against some French exports to Italy.

The French authorities last week introduced what they described as a "technical visa" for imports of sweaters from OECD countries, which had risen by nearly 35 per cent in the first five months of this year.

Officials emphasised, however, that this measure was aimed purely at monitoring the quantities of sweaters involved and their country of origin. Import licences would be automatically granted on request, they said.

It is nevertheless clear that the measure was aimed mainly at Italian exporters and that the requirement of a technical visa is an administrative obstacle to trade which appears to be contrary to EEC regulations, particularly since the Commission's prior permission was not sought.

Replying to French criticisms that a large proportion of Italian knitwear was manufactured at abnormally low cost on the black market, Sig. Artom did not deny that such a market existed in Italy.

But he claimed that it represented only a very small proportion of textile manufactures and that its production was destined mainly for the domestic market and not for export. Moreover, the cost of an hour of labour in the official Italian textile industry was higher than it was in France, he said.

The main reason why the Italian textile industry was more competitive than that of its European neighbours was its modern equipment.

U.S. renegotiation moves worry Asia

BY PHILIP BOWRING IN HONG KONG

HONG KONG, South Korea and Taiwan are becoming increasingly worried at U.S. pressure to renegotiate bilateral textile agreements to make them even more restrictive.

The U.S. pressure to go back on agreements concluded under the Multifibre Arrangement which are less than two years old may harden the attitudes of developing countries generally at Geneva where talks on trade "safeguards" are taking place.

Ironically, the U.S. pressure on its three largest developing country suppliers of textiles and garments comes at a time when European countries are up in arms against an alleged U.S. invasion of their synthetic fibre and fabric markets.

The U.S. pressure on Asian suppliers is the direct outcome of a paper published by the U.S. Administration in February on assistance for what is termed the "beleaguered" U.S. textile industry.

The textile programme outlined in the paper was described as "an integral part" of the recent Tokyo Round trade talks of the General Agreement on Tariffs and Trade, concluded in Geneva and which has received Congressional approval from the U.S. and other key industrialised countries.

This is seen as meaning that the programme is a quid pro quo for getting U.S. industry and Congressional support for the tariff cuts and other aspects of the Tokyo Round talks.

Now the U.S. is trying to pressure the "leading major exporting countries"—meaning Hong Kong, South Korea and Taiwan—to enter into negotiations. All three have, unwillingly, agreed to meet with U.S. officials, but so far have not yet agreed that any negotiation on the subject of the U.S. administration paper is either necessary or proper.

However they are well aware that pressure is intensifying. President Carter, faced with the combination of an election year and rising unemployment, looks likely to try to deliver a domestic sectional promise at the expense of U.S. international obligations.

In his meetings with exporting country officials, Mr. Michael B. Smith, the U.S. chief textile negotiator, has been concentrating his attentions on what are known as the flexibility provisions of existing restraint agreements. These allow a certain amount of "swing"—averaging about 5 per cent of a quota category from one category to another. They also allow for some unused quota—normally 6 per cent—to be carried over from one year to the next and a similar amount to be borrowed from the subsequent year.

U.S. pressure for the renegotiation of bilateral textile agreements is increasing. But major supplying nations will argue that Washington is in no position to ask for further restrictions on the basis of market disruption when their own industry's sales are already on a sharp decline

The U.S. wants to eliminate, or at least reduce, flexibility. The U.S. industry claims that flexibility provisions can allow exports of a particular category to be increased in one year by about 18 per cent, in addition to the normal allowable 6 per cent annual increment.

However, supplying countries argue that this is largely theoretical and would rarely cause market disruption. They say that flexibility is essential for an industry as volatile as textiles, which is subject to quick fashion changes as well as sharp economic cycles. Abolishing flexibility would make the market less able to cope with consumer demand fluctuations. The three major exporters are likely to fight hard to maintain flexibility.

They will probably fight even harder against another outline proposal in the U.S. Administration paper. That is, to link quota levels in one year with the previous year's trade. According to the U.S. paper if a quota level was only partly used one year, the next year it would be effectively reduced to the level of the preceeding year's trade plus one half of the amount of the unfilled quota.

Supplying countries see this as a formula for gradual but enforced retrogression in trade. Even in a good year, overall quota levels are never fulfilled because quotas often exist in categories for which there is weak demand or the supplier is not competitive.

For example, last year, which was a good one for textiles, Hong Hong's quota to the U.S. was about 80 per cent fulfilled. This year the figure is likely to be down to 70 per cent as the market has weakened. Any system basing quota levels on the previous year's actual trade will ensure that every time the market weakens the quota base will be reduced.

The market is already weakening now. Hong Kong's textile exports to the U.S. so far this year are down 16 per cent in volume terms. And Taiwan recently announced a marked reduction in quota utilisation rate for the first half. The second half is expected to be worse as U.S. recessionary trends take a grip.

As U.S. pressure for renegotiation increases, major supplying nations will argue that Washington cannot ask for further restrictions on the basis of market disruption when their own industry's sales are already on a sharp decline.

However, the weaker the market for exporters, the weaker it is likely to be for domestic producers, and thus the stronger the pressure for additional protection.

A key factor in the U.S. equation could be exports. Though a big net importer of textiles, U.S. exports were a significant £2.6bn ($1.2bn) last year, compared with imports of $7bn. Imports this year are expected to fall 10 per cent in volume while exports should rise significantly, helped by the cheaper dollar, lower U.S. domestic oil prices which gives advantage to U.S. synthetic fibre and fabric makers, and the heavy investment in the most modern machinery seen in some sections of the U.S. industry.

Apart from battling the U.S. on the basis of the need to honour agreements, the Big Three Asian exporters will argue that the U.S. industry is not quite as "beleagured" as is being made out.

SHIPPING REPORT

Moderate rates for tankers

By Lynton McLain

THERE WERE no major upsets to the oil tanker trading market last week, and most owners gained moderate rates for charters.

Owners of very large and ultra large crude carriers operating out of the Gulf for discharge in the West recorded Worldscale 46½/47½. Filipino charterers paid rates at Worldscale 56 for 230,000-ton cargoes of crude oil.

However, owners operating from the Gulf faced the prospect of increased operating costs as a result of the declaration by insurance underwriters that the Gulf area had been termed a war zone. Current rates have not been affected, so far.

Freight rates remained steady for most of the week, and brokers saw little prospect of immediate increases as long as 2.25m tons of tanker tonnage remains idle, awaiting cargoes in the Gulf.

The total of idle tonnage up to the end of August is estimated to be 4m tons, and slack demand for small and medium-size tankers has contributed to the idle tonnage.

A 170,000-ton vessel gained Worldscale 60 for western discharge, and a 130,000-ton vessel for India gained Worldscale 65. A 53,000-ton vessel chartered by Japanese interest gained Worldscale 210.

Demand out of West African markets slipped last week, but in the Mediterranean, trading was more active.

There was little change in the Caribbean markets and a 60,000ton tanker gained Worldscale 170 for discharge in the U.S. Gulf.

On the dry cargo markets, brokers suggested the bottom of the "summer slump" had been reached.

Record Irish trade deficit

BY STEWART DALBY IN DUBLIN

IRELAND recorded a record trade deficit of £155m for the month of June. This brought the external trade balance for the first six months of this year to a deficit of £789m compared with £435m for the comparable six months of 1978.

The worsening deficit was due to a combination of sluggish exports, particularly food exports which account for just under half of total visible exports. Cattle and beef sales abroad, which together with dairy products make up 80 per cent of Ireland's agricultural exports, have slowed down considerably. This is because farmers decimated stocks last year to take advantage of the good prices prevailing under the Common Agricultural Policy.

At the same time imports have started to soar, partly as a result of the depreciation of the Irish pound against sterling last March. The demand for capital goods has continued to grow and of course the depreciation has meant higher prices. Consumer durables like cars and other items have also continued to increase. It has become clear that the government's guidelines for an 18 per cent limit on the rise in credit for this year is being vastly exceeded.

It could be that by the end of the year the trade deficit will be almost double last year's which was something under £800m. In 1978 the trade deficit translated into a balance of payments shortfall on current account of £158m. This year the government has predicted a balance of payments deficit of at least £500m. It feels confident that reserves (currently about equal to four months imports) will not be badly depleted and says the balance of payments deficit will be covered by capital inflows.

Swedish pulp prices to increase

BY WILLIAM DULLFORCE, NORDIC EDITOR, IN STOCKHOLM

SÖDRA SKOGSÄGARNA, the southern Swedish forest owners' company, took the lead last week in raising the price of pulp for delivery to European paper makers in the fourth quarter.

It will increase its price for bleached sulphate pulp by $40 a tonne to $475 a tonne from October 1.

Other Swedish companies are expected to follow suit this week, and a spokesman for Finncell, the Finnish pulp mills' sales organisation, said a decision on its prices could also be expected this week.

The increase had been anticipated particularly as the Swedish and Finnish producers maintained unchanged prices for the third quarter, even after the North American mills had raised their pulp rates. The Nordic increase, the third this year, means that the lead pulp price will have gone up by $140 a tonne from the bottom level reached in 1977.

The Swedish producers point out that since the last increase the dollar rate has fallen from SKr 4.40 to SKr 4.20, entailing a loss in kroner terms of around $20 a tonne on pulp, or close to half the latest increase.

Oil prices and freight rates have also risen and the Swedish mills expect to pay higher prices for pulpwood, when current negotiations with the forest owners are concluded.

Industry experts had anticipated an increase to $480-485 a tonne in the price of bleached sulphate pulp, the leading grade, but the Swedish mills are not anxious to repeat the mistake they made in 1974 and 1975 when swift price advances broke the market.

A recession in the U.S. could also lead to an increase in supplies of North American pulp to Western Europe, even though for the time being the market is very tight with mills working to capacity on both sides of the Atlantic.

Mr. Bo Wergens, managing director of the Swedish Pulp and Paper Association, estimates that at the new prices the least effective mills will be able to balance costs and income while the more modern plants will obtain a comfortable return on capital.

Nordic producer stocks are at present much lower than normal. The Swedish mills have about 180,000 tonnes, or roughly two weeks output, in stock while the Finnish mills hold some 100,000 tonnes.

Japan's car exports fall

TOKYO—Toyota Motor said its vehicle exports in July fell 1.8 per cent to 116,100 from 118,200 in June, but rose 0.1 per cent from 116,000 in July last year. At the same time Nissan Motor said its vehicle exports in July fell 0.3 per cent to 95,300 from 95,600 in June, but were up 7.8 per cent from 88,400 in July last year.

Toyota's July exports comprised 73,300 passenger cars, 40,900 trucks and 1,900 buses, while Nissan's total included 74,200 cars, 20,200 trucks and 900 buses.

Toyota said it exported 3,600 vehicles to Britain, up 129.2 per cent from a year earlier, 51,300 vehicles to the U.S., up 24.6 per cent, 9,000 to Saudi Arabia, down 2.5 per cent and 3,400 to Australia, down 20.7

Nissan said its exports included 43,600 to the U.S., up 12.7 per cent from a year ago, 12,000 to Britain, up 8.6 per cent, 3,300 to Saudi Arabia, up 51.0 per cent, 5,400 to Mexico, up 60.0 per cent and 3,900 to Taiwan, down 27.6 per cent.

Toyota said its vehicle production in July rose 2.3 per cent from June to 278,500, the second highest monthly increase on record, and rose 13.1 per cent from a year earlier. Nissan said it produced 185,400 in July, down 7.8 per cent from June and down 0.5 per cent from a year earlier.

Reuter

● Thailand's Prime Minister Mr. Kriangsak Chomanan has handed over a letter of intent to representatives of a Japanese consortium of steel producers to supply 595 kilometres of steel pipes for a natural gas project, Reuter reports from Bangkok. The Japanese consortium comprises Nippon Steel, Nippon Kokan, Kawasaki Corporation and Sumitomo Metal Industries.

World Economic Indicators

INDUSTRIAL PRODUCTION

					% change over previous year	Index base year
	July '79	June '79	May '79	July '78		
U.S.	152.1	152.3	152.1	145.9	+4.2	1967=100
	June '79	May '79	Apr. '79	June '78		
U.K.	116.0	114.3	113.3	111.1	+4.4	1975=100
West Germany	132.6	126.5	129.3	118.9	+11.5	1970=100
Holland	125.0	120.0	124.0	120.0	+4.2	1970=100
	May '79	Apr. '79	Mar. '79	May '78		
Italy	140.8	128.8	144.0	133.2	+5.1	1970=100
France	131.0	129.0	131.0	129.0	+1.6	1970=100
Belgium	127.3	129.1	126.6	119.5	+6.5	1970=100
	Apr. '79	Mar. '79	Feb. '79	Apr. '78		
Japan	129.3	128.7	128.8	122.0	+6.0	1975=100

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Worsted mill to close as demand falls

BY RHYS DAVID, TEXTILES CORRESPONDENT

ILLINGWORTH MORRIS, the Yorkshire wool textile group, is to close one of its fine worsted mills in Huddersfield with a loss of around 350 jobs, partly as a result of weak overseas demand following the rise in the value of sterling.

The company, Britain's biggest wool textile group with a labour force of about 9,000 is concentrating production of its Huddersfield fine worsted subsidiary at Kirkheaton, and is closing its Trafalgar mill at Huddersfield. The two mills employ about 760 people, including part-time workers. About 400 will be retained, after the Trafalgar closure, which is to be phased over the next 12 months.

Fashion trends

The strength of sterling has hit demand for worsteds in two of the company's most important markets — the U.S. and Japan. Fashion trends over the past year have also swung away from worsteds—the UK industry's main speciality. This, too, has caused a sharp drop in sales on most markets.

In the first three months of the year, overseas sales of woollens were up in volume from 5.9m to 6.5m sq metres, but worsteds showed a drop from 4.86m to 3.1m sq metres.

The industry has also been affected by higher imports of wool textile yarns and fabrics and of finished garments into the UK. In June, numbers employed in the industry fell by a further 900 to under 54,000 aginst 58,000 a year earlier.

Restrictions

In response to pressures from the industry, new restrictions on imports of wooltops—combed wool for processing into yarn—from South America were announced last week. The Department of Trade said quotas had been negotiated by the EEC Commission on imports of tops from Uruguay.

A similar restriction on imports of tops from Brazil was imposed on August 1. This will limit them to 104 tonnes during the rest of this year, rising to 568 tonnes in 1982.

The EEC is also imposing quotas on imports from Poland into the UK of men's and boys' jackets. These have risen from 39,000 in 1977 to 97,000 in the first half of this year. The permitted limit for the whole of this year will now be 120,000 units.

Small firms report criticised

Financial Times Reporter

THE CONCLUSION of the Wilson Committee on financial institutions that there is no "systematic bias" against small firms in the UK financial system is rejected today by the Association of Independent Businesses.

In an assessment of the committee's interim report published earlier this year, the association says such a bias exists. "If the fortunes of the independent business sector are to be improved, that financial bias needs to be acknowledged."

The association, which claims to speak for 25,000 companies, including a quarter of those with a turnover of more than £1m, makes a plea for the Wilson Committee to make better use of the abundance of evidence and research material available to it. Otherwise, "a valuable opportunity to examine ways of helping the British economy out of its present predicament will have been lost."

The association stresses that taxation is important in any consideration of the finances of small and independent businesses. It suggests that, if an analysis of taxation has not been possible because of the Wilson Committee's terms of reference, "perhaps the Government could consider changing the committee's ground rules so as to expedite the work."

It welcomes the proposal to permit UK companies to buy back their own shares, and supports Wilson's interest in a new kind of small firm investment company and loan guarantee schemes.

Tobacco cash lottery decision challenged

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

IMPERIAL TOBACCO's "Spot Cash" instant lottery promotion for some king-sized cigarettes is again to be legally challenged.

The Attorney-General will ask the House of Lords to reverse an Appeal Court decision last March which declared the Imperial lottery promotion lawful in every respect. The Lords is not expected to consider the appeal until next January at the earliest.

The Lords' judgment will be significant for the future use of instant lottery promotions in a number of consumer product areas as well as grocery retailing.

Imperial has already relaunched the "Spot Cash" promotion, which offers smokers the chance to win cash prizes of £1 to £5,000. The cigarette packets include cards with several "windows" which, when rubbed with a coin, reveal whether a prize has been won.

The Attorney - General's decision to challenge the promotion is the latest move in a long-running dispute over the scheme's legality. Imperial launched the promotion last autumn for three John Player brands. Sales increased by about a third and a 50 per cent jump in market share followed.

British-American Tobacco—a major competitor—complained to the Attorney-General that the scheme contravened legislation governing lotteries. The matter was passed to the Director of Public Prosecutions who decided to initiate criminal proceedings against several Imperial executives.

Imperial sought a civil court ruling that the scheme was lawful and the criminal prosecutions should not go ahead. Although the High Court refused to make such a ruling, the Appeal Court ruled that the lottery was lawful. Lord Denning criticised the DPP for acting "out of hand."

The criminal proceedings have been dropped now that the issue is to be decided by the Lords.

Although the "Spot Cash" promotion has been relaunched, it does not appear to be enjoying as much success as previously. Imperial still, however, retains its overall leadership in the cigarette market, especially for the fast-growing king size sector, which now accounts for six out of every 10 cigarettes sold.

Imperial has some 45 per cent of the king-size market, followed by Gallagher with about 20 per cent and Carreras Rothmans with 19 per cent.

Telephone workers likely to go back after offer

BY OUR LABOUR STAFF

MEMBERS OF the Civil and Public Services Association involved in the Post Office telephones dispute are believed to have voted for a return to work after a pay offer averaging 17-20 per cent.

The executive of the Society of Civil and Public Servants meets today to decide whether to recommend an improved offer to their technical and supervisory staff, who operate computer centres at Harmondsworth and Leeds.

But an official of the society's Post Office Data Processing branch said yesterday that telephone bills could still be delayed. Although management expected the CPSA to end its 15-week strike, members of the SCPS were continuing their 19-week strike.

Without 80 key technical and supervisory staff who were in the SCPS, it would be "impossible to restore effective computer services," he claimed.

Mr. Gordon Blair, vice chairman of the branch said yesterday: "Hopes of a resumption of work in computer centres on Monday are merely wishful thinking."

SCPS members had rejected the 17-20 per cent offer, and were prepared to continue the strike "for much longer."

● The cost of sending a first-class leteer goes up today from 9p to 10p. Second-class mail rises by 1p to 8p.

The new tariff could be the last to be introduced without consumer consultation. The Post Office Users' National Council is to meet the Post Office and Government representatives soon to discuss setting up a "continuing dialogue" on postal charges.

Court staff in strike vote today

AN IMMEDIATE strike that might disrupt the working of London's magistrates courts might be decided today at a meeting of nearly 500 administrative staff.

They will be told that the Home Office has rebuffed their attempt to secure rises of up to 30 per cent by declining to discuss the claim.

The staff, members of the Society of Civil and Public Servants and the Civil and Public Services Association, have refused a 9.4 per cent offer and are pursuing their demand to bring their pay-level into line with that of civil servants. The meeting will be at Caxton Hall, London.

Ten days ago, members of both unions agreed to strike in a fortnight.

Mr. Bernard Studd, the society's national officer said: "I can produce a case of appalling industrial relations which can only be designed to produce industrial ferment and to encourage our members to take strike action."

Mr. Alastair Graham, the association's deputy general secretary, said: "Members will be very bitter that a meeting has not taken place."

Any strike could be spread outside London by the Association of Magisterial Officers, representing 4,000 staff, halting maintenance payments and the issuing of summonses.

Retirement bond sales top £1bn

BY TIM DICKSON

ALL-TIME sales of the National Savings Movement's index-linked retirement certificates reached the £1bn landmark last month. Receipts in July of £27.8m from the issue contributed to a net inflow into the National Savings coffers of £26.6m, or £72.3m, including accrude interest.

Net receipts for the month from the retirement certificates, which must be held for at least a year and which are available only to men over 65 and women over 60, were the best so far this year. In the first four months of the 1979 financial year, they were more than double the figure of the comparable period last year.

Receipts from the retirement issue are likely to be healthy this month, since anyone who buys them by August 31 will get the benefit of July's record rise of 4.3 per cent in the retail price index. Under the rules, the index figure to which the issue is linked is always two months behind the month when the purchase is made.

Elsewhere, the July picture was not so bright. Fixed-interest National Savings certificates, including the 18th issue, brought in a net £8.4m of new money, but premium savings bonds were disappointing, with repayments of £10.1m just exceeding receipts of £10m. That is the first time for five years that provisional figures have shown a net decrease.

Holiday spending was thought to be responsible for the £12.3m outflow from the National Savings Bank ordinary account, while the investment account, which had a net increase of £8.7m, is expected to benefit from the new higher annual interest rate of 12½ per cent to be introduced next month.

The total sum administered by the Department for National Savings has now exceeded £12bn.

Storm in teacup over Britain's favourite drink

BY OUR CONSUMER AFFAIRS CORRESPONDENT

THE BRITISH tea and coffee industries, together worth more than £575m at retail prices, are locked in a marketing battle over which drink will prove more popular in the 1980s.

Although tea is acknowledged as still being the favourite British beverage, coffee processors say that the trend is towards drinking more coffee.

The industry says that, although 10 years ago, seven cups of tea for every one of coffee were drunk, the ratio has fallen to 2.5 cups of tea for every one of coffee.

However, the Tea Council points out that while 51 per cent of households buy coffee each month, 84 per cent still buy tea regularly. Coffee, although more expensive than tea, has annual sales of £225m, compared with £350m for tea.

Tea sales, the industry says, have recovered from a decline of a few years ago caused by rising commodity prices, to become more popular again.

The future lies with teenagers and people in their 20s who will form the bulk of the beverage market over the next two decades.

Many young people consider tea an old-fashioned drink, although the tea industry has just spent £1m on an advertising campaign to persuade them otherwise.

IN BRIEF

FOUR HUNDRED engine-testers who have been on strike at the Perkins diesel engine plant, Peterborough, for a fortnight, will vote at a mass meeting today on whether to stay out. Over 4,000 production workers have already been laid off.

● The National Executive of the National Union of Journalists has urged the Government to refer the take-over of the Long Eaton Advertiser and its associated weeklies by the Nottingham Evening Post group to the Monopolies Commission. The union says it would mean "a considerable local monopoly" and dangers to employment of journalists because of management policies of the Nottingham Evening Post.

● Many News of the World readers in the South were without a copy of the paper yesterday. More than 1m copies of later editions were lost when a dispute involving machine-room workers stopped production at 2.30 am.

Perk cuts anger unions

GOVERNMENT PLANS to crackdown on perks—starting with the company car—will face violent trade union opposition, Mr. Terry Duffy, engineering union president warned yesterday.

"It is apparent to me that the Government seems to be hell-bent on making decisions without pre-notification or consultation with the trade union movement, and that makes us collision-bound," he said in a BBC radio interview.

"I should imagine the trade unions will be reacting violently to these proposed cuts."

There were many industries where employees received a benefit as a condition of employment. If that benefit were taken away, Mr. Duffy imagined an "angry reaction" from workers.

As the representative of hundredes of car workers, he forecast that Government action on company cars would have a damaging effect on the motor industry.

He argued that the overwhelming majority with company cars were forced to use them as a tool of their trade.

Rural workers' homes threat

THOUSANDS OF rural workers will become homeless if Conservative proposals to sell off council homes go through, Mr. Jack Boddy, general secretary of the National Union of Agricultural and Allied Workers, says in a statement today.

Selling council homes would leave fewer council houses to rent and cause difficulties to farmers and farmworkers whenever a farmer needed vacant possession of a tied farm cottage.

Shortage of hares worries sportsmen

By Christopher Parkes

THE NUMBER of brown hares in Britain is now at its lowest point for a century and urgent action is needed if the population is to be maintained at "a reasonable level," the British Field Sports Society has warned.

The sporting "bag" has slumped and in some parts of the country, notably Wales and South-West England, the population is fewer than 2.5 hares per sq km, Mr. Jim Stuttard, the society's political secretary told the World Lagomorph (hare) Conference in Ontario.

The society was considering co-operating with the Game Conservancy on a research project, he said.

In France, where the population was "approaching breakdown," numbers were kept up by restocking. Some hares were being bred in captivity, but most were imported from Hungary and Poland and released to meet the demands of the country's 2m shooting men.

In the first five years of the 1970s France imported 850,000 hares. The population in France averages four per 100 hectares of hunting territory, but it is close to nine per 100 hectares in areas such as the Gironde.

Italy has also had to resort to restocking and this year buyers even came to Britain looking for hares. "The initiative has not been encouraged," Mr. Stuttard said.

In the Ukraine shooting has been banned temporarily to allow the population to recover. The ban followed a four-year investigation there.

In Poland sporting guns are allowed to operate in only half the national shoot each year and this has helped preserve the hare population.

Pit recruiting drive succeeds

A RECRUITING campaign in Nottinghamshire and Derbyshire has brought in almost all the 700 extra pitmen needed to fill vacancies left by the National Coal Board's early retirement scheme.

The board said that in N. Derbyshire in the past three months, a third of all new signings had been experienced miners.

Civil engineers gloomy about future work

BY ANDREW TAYLOR

THE SLIGHT upturn in civil engineering work earlier this year appears to have petered out, according to the latest quarterly survey by the Federation of Civil Engineering Contractors.

The outlook for the coming months is likely to continue gloomy, particularly for medium- and larger-sized companies, the federation says.

It warns that further public spending cuts on civil engineering projects would lead to "break-up of skilled teams of engineers and operatives."

This would leave the industry unable to maintain basic services like roads and sewers. Overseas work would suffer.

The federation's survey of 214 companies, in July, showed that fewer civil engineers reported improved order books. Only 36 per cent of companies said that orders had increased compared with six months ago. In the last survey in April, 41 per cent said there were more orders.

While relative value of orders remained fairly stable, the workload in real terms deteriorated — 61 per cent of companies said that order volumes either declined or remained the same, against 56 per cent in the last survey.

More companies were pessimistic about prospects for the next 12 months, with only 15 per cent expecting new orders, repair and maintenance work to increase in the period.

Main indicators for the industry, orders and employment, had weakened since the slight upturn in work indicated in the April survey. This improvement was due to the catch-up of work after the harsh winter.

Only 13 per cent of companies expected employment to rise in the next 12 months, compared with 23 per cent in April.

'Curb door dumping'

BY OUR INDUSTRIAL STAFF

THE WOODWORKING industry, which has a turnover of more than £100m a year, is urging the Government and the EEC Commission to curb the dumping of wooden doors in the UK.

Door imports in the first five months of the year totalled £4,237, close to the figure for the whole of 1978 (675,401), which was already causing concern.

Mr. Tom Dawson, chairman of the British Woodworking Federation's executive committee, said the level of imports was causing unemployment in the industry and threatening some factories.

Two-thirds of the imports are from Taiwan and Indonesia. Last year about 9m doors were sold in the UK, of which about 10 per cent were imports.

Fish farms run at loss

MANY FISH FARMS are running at a loss, according to a Reading University study, writes Richard Mooney.

The study, by the university's agricultural economics and management department, initially covered about 400 farms. This was narrowed to 160 or so engaged in table trout production. Most others are chiefly concerned with restocking for angling.

Only 30 of the trout farms were considered of commercial size, the others as small "hobby-type" operations.

On those with output five to 100 tonnes a year, average production cost was calculated at 53.5p, and average sale price £2.5p a pound. In many cases, costs were higher than returns.

But costings included an allowance for unpaid family labour, and many losing concerns were not yet at full production.

British farmed fish output was low compared with other European countries. Rainbow trout production in Great Britain was 2,500 tonnes in 1976, against 15,000 each in France and Denmark and 17,000 in Italy. British production has since risen to about 4,000 tonnes.

Royal Doulton jobs cut move

THE STOKE-ON-TRENT-based Royal Doulton china and tableware company may have to reduce its workforce by about 3 per cent in the next few months because of an expected fall in demand.

Earlier this year, the Price Commission revealed that labour costs accounted for an average two-thirds of direct manufacturing costs in the company's 17 factories.

Loss-making air routes may be cut

Financial Times Reporter

BRITISH AIRWAYS is carrying out a major review of loss-making routes and aircraft and seems likely to prune those services which consistently make losses.

The review was announced to staff by Mr. Roy Watts, the airline's chief executive, in the latest issue of the company's newspaper. Mr. Watts said that he had "instituted a study of our route structure to ensure that to the maximum extent, resources now used on any routes which are chronically unprofitable and non-strategic will be more profitably used to operate routes that give a good economic return."

The routes most at risk from the review are thought to be those between regional airports such as Cardiff and Southampton which are operated mainly by Viscount aircraft. British Airways may consider phasing out these aircraft, which are based on 30-year-old designs, and scrapping the routes.

But the shuttle services between London and major regional cities such as Edinburgh, Glasgow and Belfast are believed to be profitable.

British Airways stressed yesterday that the review was still in its preliminary stages and that no decisions had yet been taken. The Department of Trade said that there had been no pressure from the Government on the airline.

July trade figures out today

By Peter Riddell

AN INDICATION of the monthly scale of the UK's current account deficit so far this year should be provided by the July trade figures, due this afternoon.

These will include adjustments for the impact of the civil service disputes which have disrupted the flow of information from some airports.

This should not mean a large undiscovered deficit, since the Department of Trade has already estimated that the published figures so far have probably understated the level of imports by £900m.

Consequently the deficit between January and June was probably roughly £900m rather than £1.02bn as recorded to date.

This afternoon's announcement will attempt to adjust the figures back to January on a month by month basis for these distortions so there is no carry-over of understated imports beyond July.

The Department is likely to stress that while the figures will allow for distortions arising from the disruption to the information flow, the month-to-month outcome will still be distorted by sharp fluctuations in the flow of goods through ports in the first half of this year caused by the road haulage dispute.

Government may have to boost money supply, brokers say

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

THE GOVERNMENT may need to act in the coming year to ensure that the rate of growth of the money supply is not inadequately low. W. Greenwell, the stockbrokers, consider that likely to be necessary to prevent the financial squeeze on industry and the recession from being as severe as that in 1974-75.

The firm's monetary bulletin, published this morning, argues that, when the coming recession starts feeding on itself, monetary growth will become inadequate. The extent of the inadequacy can be offset by a rapid reduction in interest rates and by a rationing of official sales of gilt-edged stock.

A possible external alternative if sterling is strong would be for the Bank of England to intervene selectively in the foreign exchange markets to increase domestic monetary growth.

The brokers assume that easing fiscal policy by adding to public expenditure and enlarging the Budget deficit is against Government policy.

Had the Bank acted earlier to prevent inadequate monetary growth in 1974 the last six months of the fall in the 30-share index from 250 to 146 would have been avoided.

Greenwell believes that the authorities will intervene at an earlier stage in the coming recession than in 1974-75, and as a result the fall in the equity market will be much smaller this time than before, and the recession less severe.

The analysis assumes that, if action is not taken, the financial deficit of industrial and commercial companies (excluding North Sea oil) might almost equal the worst of 1974-75 in real terms, or about 4½ per cent of Gross Domestic Product.

However, given that property companies bore the brunt in 1974-75, the outlook facing non-property companies might be even worse than their experience in 1974-75.

The projections are based on those in the London Business School's latest forecast, except that the brokers believe that public-sector borrowing in 1980-81 will be £9bn. That compares with £10.9bn in the Business School projections.

The firm believes that if sterling M3, the broadly defined money supply, grows at 10 per cent a year in nominal terms and the inflation rate peaks at 17½ per cent this winter, the fall in the money supply in real terms in 1979-80 should be considerably less than in 1974-75 and similar to the drop in 1969-70.

Consequently, the coming recessionary pressures should be similar to those of 1969-70 and considerably less severe than those of 1974-75.

Tax and Price Index fails to end arguments

BY OUR ECONOMICS CORRESPONDENT

THE TAX and Price Index unveiled on Friday has not resolved the fierce debate about whether the Budget tax changes have made the average family better or worse off.

Mr. Nigel Lawson, Financial Secretary to the Treasury, claimed on Friday that the new index showed that tax cuts in the Budget wholly offset the combined effect of the increase in Value-Added Tax and the underlying rate of inflation between June and July.

This view has been disputed by the Government-backed National Consumer Council and other bodies. The council has broadly welcomed the index as a useful indicator of spending power but has argued that the figures produced contradict the Treasury's claims about the impact of the Budget. It has also pointed out that while the VAT increase was effective from mid-June the full benefit of the income tax cuts does not come through until October.

Mr. John Kay, research director of the independent Institute for Fiscal Studies, has also questioned the presentation of the new index.

He has noted that "the whole of the direct tax cuts effective from April are treated as if they became effective in July, including even the increases in tax thresholds in Mr. Denis Healey's Budget in April. Since all the changes affected tax liabilities from April, but the full benefits will not reach people's pockets until October, this seems very difficult to justify."

MECHANICAL ENGINEERING

Report forecasts grim prospects

BY HAZEL DUFFY, INDUSTRIAL CORRESPONDENT

PROSPECTS for the mechanical engineering industry have worsened considerably during the last four months, according to a forecast published today by the Engineering Employers' Federation.

The report, which is the work of a tripartite working party of similar structure to those at NEDO, forecasts a steep fall in home orders for engineering products during the latter half of this year and little prospect of improvement before 1981. Export orders are forecast to fall slightly for the rest of 1979, and remain at that level during 1980.

The factors responsible are:

- **Economic background**—The main development since the last report was published in April has been the increase in oil prices and the restriction in supply.

Although the UK economy is less affected by higher prices than most other industrialised countries, this has to be balanced against the very poor overall economic performance since the end of 1978.

The developing countries, which have a high potential for imported manufactured goods, will find their purchasing power restricted by higher oil prices: members of the Organisation of Petroleum Exporting Countries will mostly be unwilling to increase their imports of manufactured goods.

The Government's Budget strategy, meanwhile, will be effective only in the medium to longer term. In the short term, the mechanical engineering industry is being hit by high interest rates and a strong pound.

- **Orders** — From the home market they rose substantially in the fourth quarter of 1978, but this largely reflected the developing Drax B power station project. With no growth, and even slight decline, forecast for the economy, plus high interest rates, investment prospects for 1980 are poor.

The exceptions are likely to be mining machinery, heavy plant, and to a lesser extent, printing machinery and machine tools. Although the business climate could well begin to pick up next year, the effects on the mechanical engineering industry will probably not be felt until 1981.

Figures show that the industry has been unable to increase exports as a percentage of sales over the past few years. In 1975, exports totalled 42 per cent of sales, in 1978 they were the same; imports, meanwhile, had climbed from 28 per cent of sales to 31 per cent.

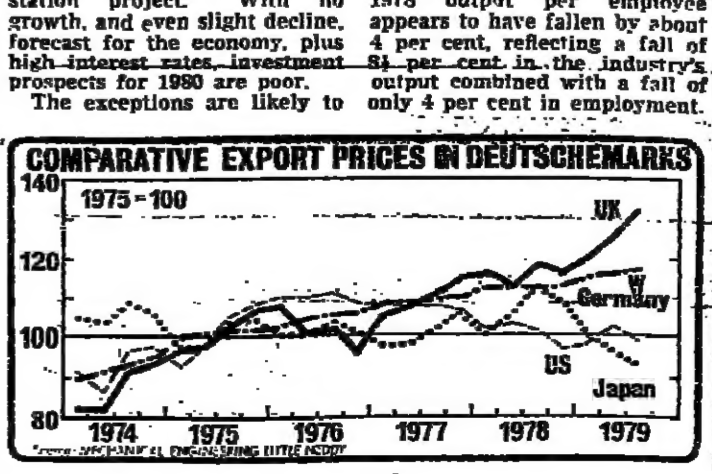
The best export prospects are probably in the EEC. Sales to North America could decline towards the end of the year or early in 1980 as the effects of economic recession are added to lack of UK competitiveness against local competition.

The Middle East (particularly Iran) and North Africa, which have been largely responsible for the recent decline in export value, are not expected to change very much. But Iraq could be more promising. China cannot realistically be expected to become a major source of business for the UK industry in the near future.

- **Costs and prices**—The increase in export prices against those of our competitors is due not only to the strength of sterling but also to the relatively high rate of inflation and the low relative rate of productivity growth. These two facts should have combined to allow for the depreciation of sterling, but the increase in oil prices is keeping up the value of the pound.

- **Manpower**—The underlying trend in the industry's productivity has been downward since 1974. Between 1974 and 1978 output per employee appears to have fallen by about 4 per cent, reflecting a fall of 8½ per cent in the industry's output combined with a fall of only 4 per cent in employment.

COMPARATIVE EXPORT PRICES IN DEUTSCHEMARKS



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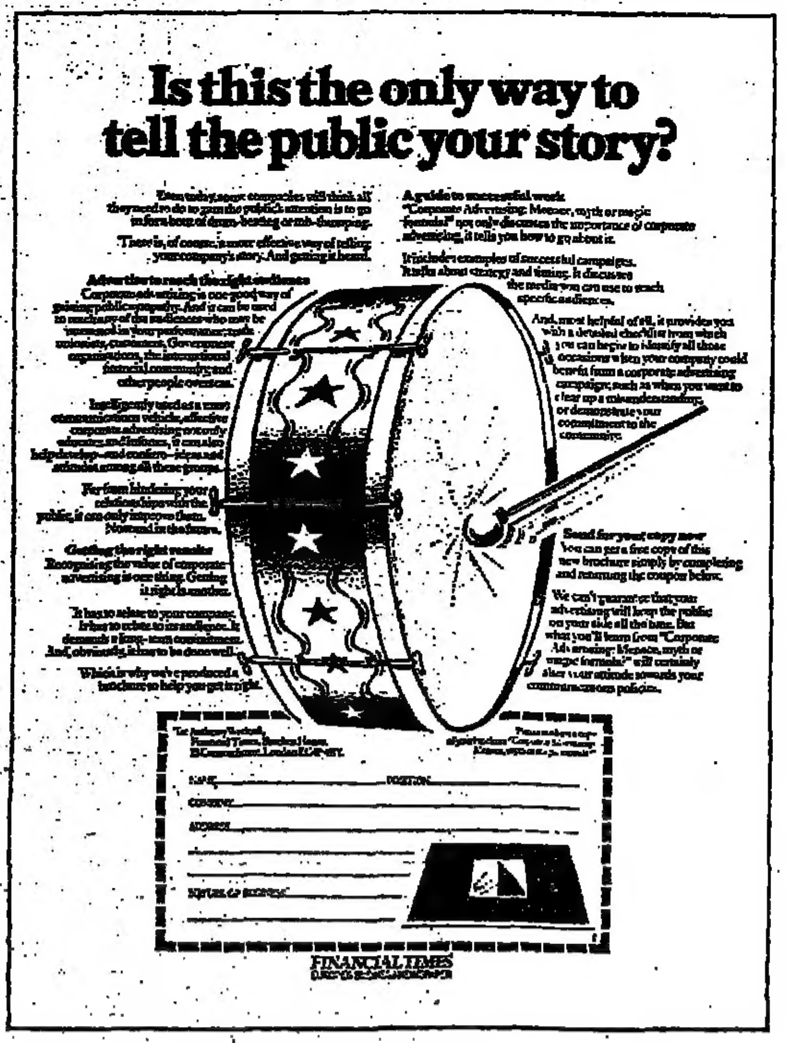

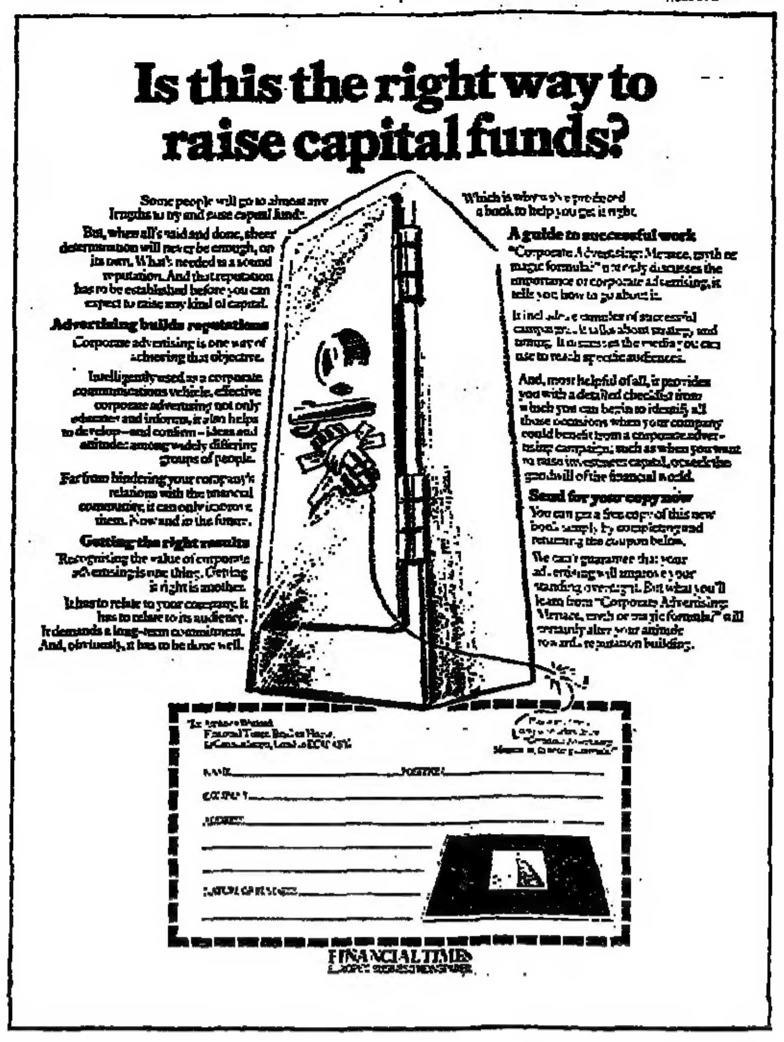

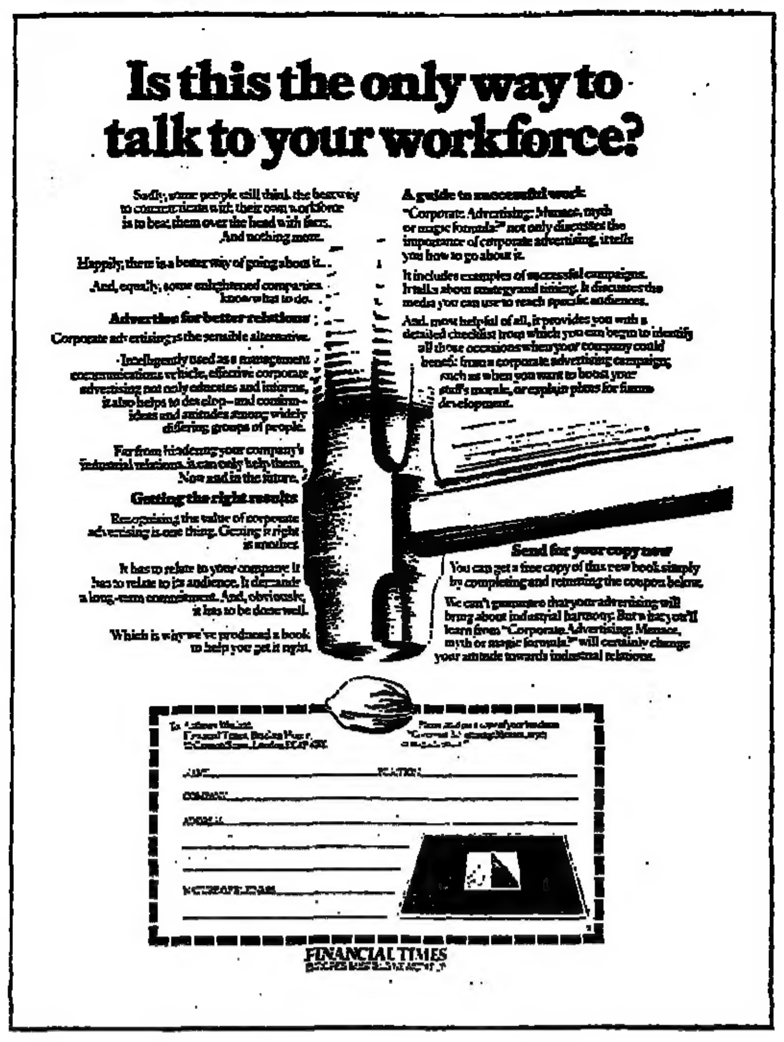

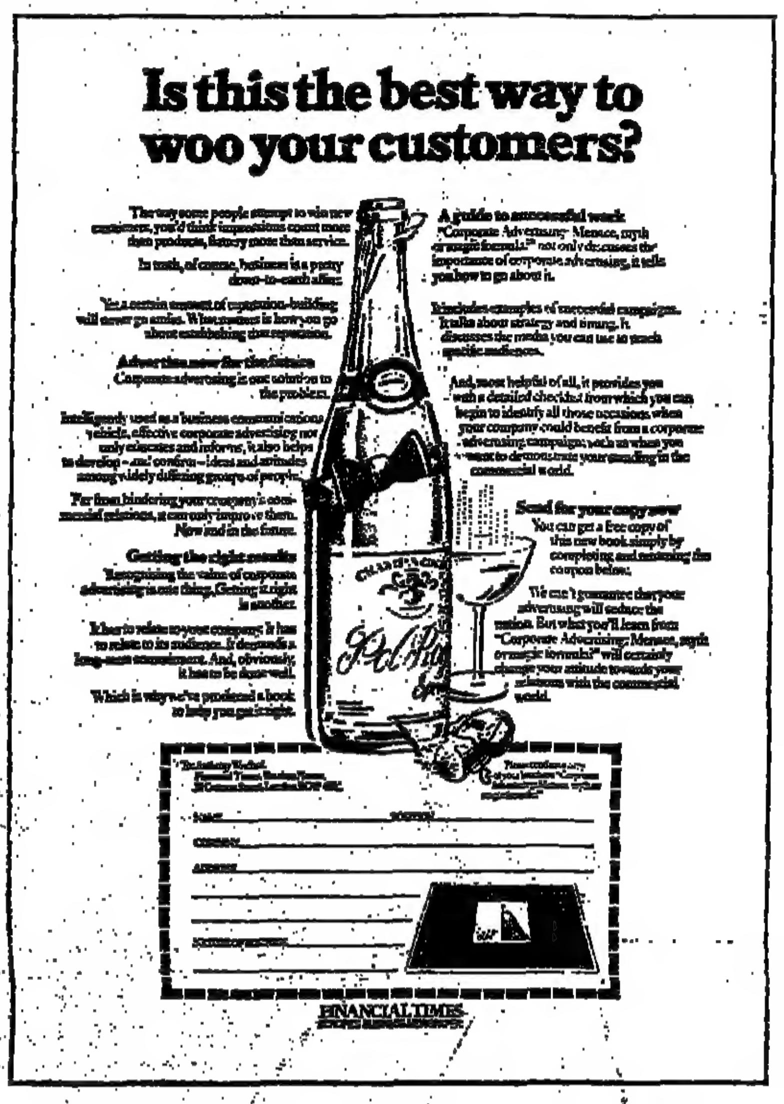

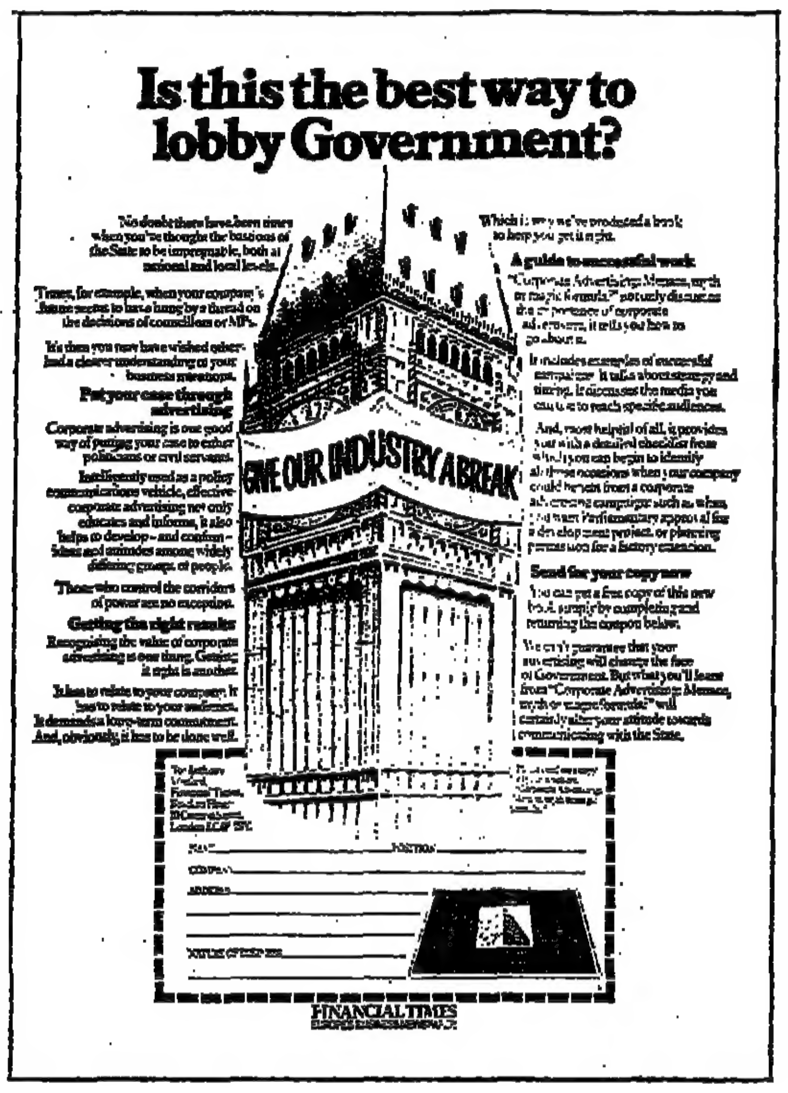

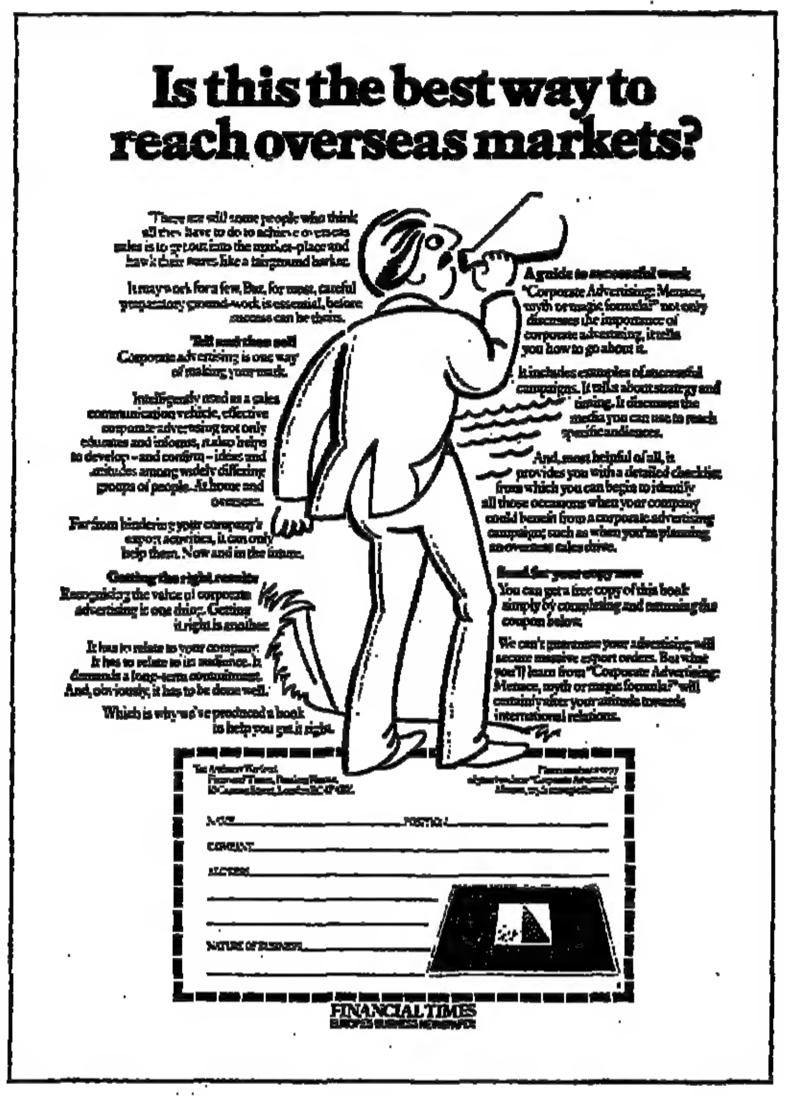

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Technical News

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● SAFETY

Fast braking system

DYNAMIC-braking equipment to stop most types of three-phase induction motors of up to 5 hp, rapidly and consistently, comes from Tronic Electronic Services of Ulverston, Cumbria.

Equally suitable for operator protection or repetitive process control, this Dynabrake system is capable of emergency stopping a motor drive in less than 0.1 seconds. The braking period can be extended, if required, by the adjustment of a multi-turn potentiometer.

Dynabrake does not rely on conventional dc injection or mechanical methods to achieve braking. It operates, instead, on a precisely-timed phase selection principle developed at the University of Newcastle-upon-Tyne and is the first commercial exploitation of this development.

Self-excitation is induced at one set of stator windings, while a low impedance path is introduced, by way of thyristors, across the other windings to provide secondary stage braking. With the aid of a variable electronic time delay, extremely fast fail-safe braking is achieved.

Because the new braking system utilises the kinetic energy stored in the motor and load, any interruption of supply to the motor — due to mains failure or the activation of safety or control switches — will apply the same braking effect. Also, the peak braking current will be considerably less than the peak currents experienced during motor starting, thereby obviating the risk of motor damage.

Of compact design, with the basic unit measuring only 215 mm by 215 mm by 150 mm (8½ in by 8½ in by 6 in approx.), the Dynabrake system may be mounted directly on machinery and plant or built into a control panel.

Tronic is at Lund Road, Ulverston, Cumbria, LA12 9BG. Ulverston 55839.

Protects the welder

HIGH LEVEL of protection, low weight, extreme comfort and wide visibility are characteristics of a new Airstream welding helmet announced by Racal Safety.

Intensive research and development work into new methods of protection demanded by many industries has led to the AH2 MK2 and the version is a totally new Airstream with benefits of lung, eye, face and head protection tailored to guard welders against many of the potential hazards encountered in their work. The new model joins the Airstream family of anti-dust helmets of which over 60,000 are in worldwide use.

Better ultra-violet protection and a redesigned welding shield go with low weight, good balance and high visibility when the welding shield is in use.

The pivoted heat shield is supplemented by a tough polycarbonate clear visor—giving protection to BS2091 grade 1—mounted underneath. When the heat visor is hinged up for inspection or grinding/fettling, the clear visor remains in position to protect the wearer against dust and grinding debris.

Further from Beresford Avenue, Wembley, Middx. HA0 1RU.

● COMPONENTS

A brilliant display

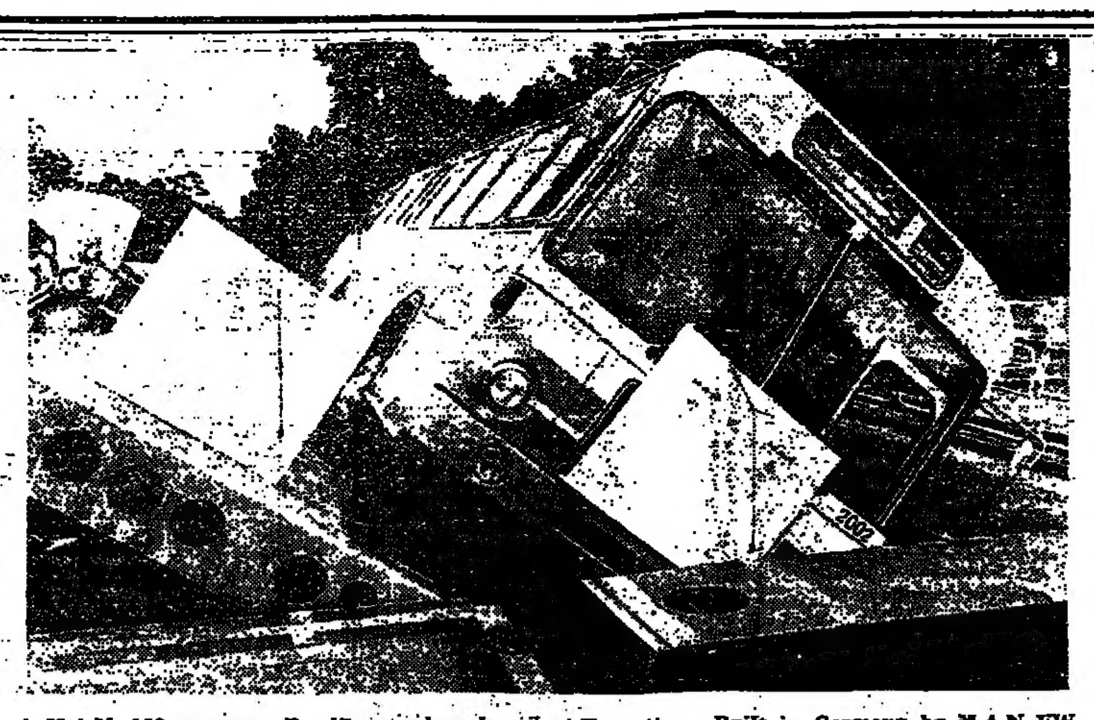
SPECTRA-TEK has a new packaged (5000 Series) display which provides seven segment, 50 mm (2 in) high characters. These bright, easily read neon-orange digits can be read at distances up to 30 metres.

The display is totally self-contained and ready to use. It comes in a satin-finished aluminium bezel and is fitted with amber or red anti-glare polarising filters.

A 5 V power supply drives the logic. A further 12 V power rail and an onboard dc to dc converter gives the 180 V gas discharge supply voltage.

Options available are a 3½ digit panel meter type display or a 4 digit module; colons and decimal points are also available. The displays can be stocked in multiples of four digits in an integral bezel housing, emphasis of particular digits can be made by varying filter colours.

Spectra-Tek, Outgang Lane, Pickering, YO18 7JA. 0751 72941.



A M.A.N. 159-passenger Bendibus undergoing a 35-degree tilt test at the Military Vehicle Engineering Establishment at Chobham, Surrey. Five of these articulated buses are to be operated this autumn in Sheffield by the South Yorkshire Passenger Transport Executive. Built in Germany by M.A.N.-VW Truck and Bus, which has its UK headquarters at 361-365 Chiswick High Road, London W4 4HS (01-995 3131), the buses are each 17 metres long and powered by an 11.4 litre 6-cylinder underfloor diesel engine.

● COMPUTING

Processing problems solved

FOLLOWING THE launch in January this year of the personal computer hire facility by Aughton Automation, interest from the process field has been mounting. Since Aughton's own background is in process instrumentation hire and measurement and control system design and contracting, the company is able to combine these activities with microcomputing to offer complete pilot systems.

Typical applications include overcoming automation problems on small systems requiring a mix of sequence and continuous control, the establishment of experimental data acquisition and analysis systems, and the provision of peripheral "number crunching" facilities for laboratory instrumentation.

The computer hire service, first based on Commodore PET machines, has now been extended to include other microcomputers, including the ITT 2020/Apple, the Tandy TRS 80 and many powerful industrial microcomputers. Aughton also offers a sale and leasing facility as well as a consultancy service to determine the best microcomputer for any given system requirement.

Software and hardware backup for system design is being provided through an association with Dr. Malcolm Taylor of the Liverpool University Computer Laboratory. The Laboratory's Microprocessor Unit is supported by an ICL 1906S which holds cross assemblers and simulators for microprocessors including the 8080, 6800, 9900, Z80 and the 8086 for development work.

Aughton Automation, Woodward Road, Kirkby Industrial Estate, Kirkby, Liverpool L33 7UZ. 051 548 6060.

Fast magnetic stripe encoding

EMI DATA, which claims to be the world's leading manufacturer of credit and security cards, has a new magnetic stripe card encoder: the MT-75.

The new unit may be used for small quantity encoding, verifying and modifying functions.

Normally, new data are entered into the MT-75's memory via a keyboard. The data being encoded appear on a visual display unit for checking. Input errors can be corrected by backspacing to the appropriate point and changing the incorrect information.

An integral microprocessor permits the programming of formats and constants into the memory, reducing operator input to variable data only. A "repeat" key allows successive cards to be encoded with the same message.

For magnetic stripe encoding, each card is inserted into a guide slot. The machine's transport then passes the card over the write head. After encoding, the card is passed over a read head for automatic verification. It is then passed into a card stacker for convenience when batch processing is taking place. The entire encoding and verifying operation takes less than one second. Any one of the three tracks on a card may be encoded and verified according to user's choice, with a single insertion.

In its "verify" mode the MT-75 will check that a valid encoding operation has been performed. The "modify" mode allows data already encoded to be changed, a single insertion of the card is all that is required.

The MT-75 is a self-contained desk top unit. It is similar in size to the average office typewriter. It is fitted with a security key lock to prevent unauthorised use and each unit incorporates non-resettable counters so that the number of cards entered and tracks validly or invalidly encoded or modified can be audited. The MT-75 works from any 240V 50Hz mains power supply.

EMI Data, Alma Road, Windsor, Berkshire, SL4 3HA. Windsor 53111.

● HANDLING

Hygienic weighing

DESIGNED TO meet the needs of the food packing industry, with particular application in meat and fish processing, a new stainless steel scale has been introduced by Richard Simon and Sons of Nottingham.

Model Series 3240 digital packing house scale is suitable for heavy washdown. The scale incorporates the latest developments including a dual housing system which protects the vital analogue signal from interference so guaranteeing accuracy, and an automatic test programme to show that each segment of each display element and the indicator lamps are functioning properly.

All electronics are fully protected during cleaning. The development of special magnetic switches ensures a watertight seal by eliminating front panel switch openings through the housing. The display window openings are protected by a silicone rubber adhesive.

The single cantilevered guided beam load cell, which accepts off-centre loading, replaces flexures and parallel plates and eliminates the necessity for complicated multiple load cell systems. There are no levers, pivots or bearings to wear out or corrode and the load beam is completely protected by neoprenelined bellows.

Available in a range of capacities from 25 to 500 lb and in a choice of weighing platform dimensions, it will convert to metric by means of a switch in the display housing.

Richard Simon and Sons, Basford, Nottingham (0602) 277721.

Crawler-mounted crane

AN 18-tonne capacity Fuchs crawler-mounted strut jib crane with a hydraulically-adjustable track gauge and which can be equipped with a 28.8 metre boom-fly configuration to give a maximum height of lift of 27 metres has been introduced.

The crane is manufactured by Johs. Fuchs KG of Ditzingen, West Germany, and will be sold in the UK by Vanesco of Garth Road, Morden, Surrey (01-330 0101).

It has an air-cooled Deutz diesel engine which powers all crane motions and its track system can be adjusted to a gauge of either 2.2 or 2.75 metres. The narrow gauge is used when the crane is being transported on a low loader and when it is carrying out general purpose light lifting duties. The wide gauge is used when dealing with heavy lifts.

It is stated that with the tracks set at 2.2 metres and when equipped with a 7 metres main boom, the crane will lift a maximum of 13.5 tonnes at 3 metres radius. With the tracks set at 2.75 metres and with an identical boom, it will lift 16.4 tonnes at 3 metres.

● WELDING

Designed for tough work

MANUAL metal-arc welding electrodes which deposit low carbon 1 per cent Ni-Mo alloy steel weld metal have low iron powder content, together with a balanced deoxidation system which gives reliable notch toughness at sub-zero temperatures.

Slim coating diameter gives free access in tight corners during preparation, minimising the risk of slag traps. Thus larger diameter electrodes may be used for joint filling. This is designated OK 8018-C3.

OK 2CrMo.B is also a basic coated, low hydrogen manual metal arc welding electrode but which deposits nominally 0.04 per cent carbon—2¼ per cent chromium—1 per cent molybdenum low alloy ferritic steel weld metal. The electrode coating is free of iron powder additions and deposits particularly clean weld metal, thus minimising undesirable ultrasonic reflections. The electrode design has a controlled low level of residual elements to mitigate hot, transverse and re-heat cracking the weld metal has a high notch toughness and creep rupture ductility. Low weld metal hydrogen potential and a low fume emission rate are other characteristics.

The first electrode is suitable for welding the 1 per cent Ni low alloy steel plate, pipe, forgings and castings used for combined high yield strength and good low temperature toughness properties in the construction of cyrogenic plant to be operated at temperatures down to −40 degrees C.

Major applications for the second specification are in the chemical and petro-chemical industries due to high resistance to hydrogen attack and good corrosion resistance to sulphur-bearing crude oil.

ESAB, Beechings Way, Gillingham, Kent ME8 6PU. Medway (0634) 34455.

● MATERIALS

Less likely to tear

TUFWRAP, A new tear-resistant protective wrapping produced by Carrs Paper, is suitable for case liddings and linings, deck cargo and general heavy-duty packaging.

It is based on a special flat lying plastic net that is non wicking and rot-proof laminated with a bitumen moisture barrier and a Kraft outer ply. In the event of puncture damage at any point, it is virtually impossible for the tear to spread.

Two superior grades have polythene outer coatings selected for their water shedding properties. One is a clear polythene, the other is black for ready identification of the coated surface and to create a highly effective barrier against ultra-violet light, particularly desirable in certain exporting circumstances.

Developed in conjunction with the automotive industry, Tufwrap is supplied in sheets or rolls up to 1750 mm wide to minimise or eliminate the need for jointing and to reduce handling.

Carrs Paper, Shirley, Solihull, West Midlands B90 4LJ. 021-744 2215.

● COMMUNICATION

Fibre optic cable

TWO TYPES of fibre optic cable, designed by Fibronics of Israel for both computer and general industrial applications, are now being marketed in the UK through the Data Products Division of Cole Electronics, 105-107 Lansdowne Road, Croydon CR0 2BN.

One type is suitable for computer-to-computer application while the other is a heavy duty cable able to withstand pulling forces of 100 kg and especially intended for industrial environments.

Both types of cable are made from plastic-clad, fused silica fibre with an attenuation of less than 15 dB/km. They can be supplied with or without installed connectors in lengths up to 1 km or cut to order.

Building and Civil Engineering

£14m awards to Laing

INDUSTRIAL Engineering and Construction Division of John Laing Construction, in a joint venture with TROCON of Amman, has won a £7.5m water supply contract in the Aqaba region of Southern Jordan.

Water Supply Corporation of the Hashemite Kingdom of Jordan placed the contract and work has started on the project, which includes laying a 68 mile (110 km) water pipeline over rocky desert terrain, the installation of power transmission cables and a number of ancillary buildings. Completion is expected by October 1980.

The pipeline consists of 12 miles (19 km) of gathering mains which will feed water from eight wells into a reinforced concrete collection reservoir of 44,000 gallons (200 cubic metres of rock).

Consulting engineers are Howard Humphries in association with Arabtech.

At home, in the Oldbury area of the West Midlands, a prestige hypermarket complex is to be built for £7m by John Laing Construction.

The contract for a SavaCentre two-storey car park and other site works at Freeth Street, Oldbury, has been awarded by SavaCentre, the joint venture between J. Sainsbury and British Home Stores. Work is due to start soon, with completion by November 1980.

Covering a ground area of about 138,000 square feet (12,800 square metres), the 30-foot high SavaCentre will include sales areas and stores, with a restaurant, offices, staff dining room and refrigeration plant on suspended mezzanine floors.

In Scotland Laing has started work on a contract worth nearly £900,000 for the fitting-out and completion of the structural shell to provide a new store for British Home Stores at the Kilbowie Comprehensive Development Area, Clydebank, near Glasgow.

Norwest Holst contracts

CONTRACTS WORTH about £4.4m have just been awarded to Norwest Holst, including a £2.5m job from the Strathclyde Regional Council for the construction of the first phase of the Garnock Valley sewer from Hillend to Waterside.

Work includes constructing and laying 4.25 km of 1350 mm internal diameter sewer at an average depth of 6.5 metres. About a third of the sewer is in tunnel, the remainder in open trench. There are also three river crossings with associated manholes.

Also awarded by this council is a £605,700 project for the construction of a rectangular single compartment service reservoir in reinforced concrete to retain 5m gallons of water at a depth of 6 metres.

Central Lancashire Development Corporation has awarded Robert McGregor and Sons (Norwest Holst company) a £550,000 contract for the construction of about 1 km of new 7.3-metre-wide carriageway.

Another company in the group, Nott Brodie, has a £561,521 contract from J. Sainsbury for the completion, including fitting out, of a new supermarket at Clifton Down Development, Bristol.

Other jobs include work from Wessex Water Authority (new headworks building, surge tower, etc) and contracts from Head Wrightson Process Engineering and Simonacco.

Henry Boot kept busy

VALUED IN excess of £1.6m, an award to Henry Boot Construction for the erection and completion of two single storey warehouse/industrial units in Nottingham for Electricity Supply Nominees is the largest of several jobs which add up to over £4.5m.

The units will have steel structural framework with block internal walls. Foundations will be of composite reinforced in situ concrete ground slabs.

For the Beild Housing Association, in conjunction with the Shettleston Housing Association, a two-part £1½m job consists of a two-storey Sheltered Housing block containing 35 flats and fourteen one- and two-storey Fair Rent blocks, containing 50 terrace houses.

Following completion of Phase I of the AS Trading Estate (adjacent to the main Glasgow-Edinburgh road) Henry Boot is to undertake Phase II of this industrial development for £600,000.

The second phase contract comprises two warehouse blocks (floor area approximately 5400 sq. m) with concrete raft slabs, steel portal frames, brick and aluminium cladding, asbestos roofs, and associated roadworks. The warehouses will be divided into units, depending on lessees' requirements.

For £570,000 a children's residential hostel is to be built at Parrs Wood, East Didsbury, Manchester for the Manchester City Council. It will provide three-storey pupil living accommodation, three-storey staff flats, two-storey administration and warden's flat, single-storey teaching accommodation, a basement boiler room, and a tank room at third-floor level.

Surveying the traffic in Baghdad

THREE YEAR contract to evaluate the rapidly growing traffic problem in Iraq's capital city, Baghdad, will be undertaken by Scott Wilson Kirkpatrick and Partners of Basingstoke, Hants, who have been commissioned by the country's Ministry of Planning to carry out a comprehensive transportation survey and area traffic control plan for the capital.

One of the first tasks by the consultants will be to recommend improvements to 15 key road junctions. This work will include traffic management, improved junction layouts and, ultimately, extending the existing small-scale area traffic control scheme to the whole of central Baghdad.

As the short-term traffic management schemes are being carried out, the larger study will commence simultaneously—aim of the latter will be to determine the long-term transport requirements of the city, particularly the balance between private and public transport.

Start made on London IBM centre

MANAGEMENT contractor for the new central London marketing centre for IBM UK is to be Taylor Woodrow.

In addition to offices, provision has to be made for a river wall complete with a landing stage. The company says its present appointment is for the pre-construction phase (planning and budgeting) for a six-storey office block. Work will involve provision of a 220-metre long river wall, calling for the reclamation of some 7,500 square metres of foreshore. The building, between the National Theatre and Kent House (London Weekend Television), will have a reinforced concrete frame with precast concrete panels.

The office block, offering about 27,900 square metres of floor space, will include conference amenities, cafeteria, kitchen, and plant rooms, car parking and loading bay. The structure will have two sub-ground levels and to this will be added four storeys of offices and a further two storeys above for plant and lift machinery. The pre-construction phase is now well under way.

Architects are Denys Lasdun Redhouse and Softley; consulting engineers are Ove Arup and Partners and quantity surveyors are Northcroft Neighbour and Nicholson.

Housing for Partington

HOUSING work valued at £3¾m has taken Partington Construction's order book to a point where the company can expect a significant increase on the £12m reported for the year to April 31.

Steady demand for industrial and commercial building is being sustained: a number of factory units are ready for handing over at the 20-acre Westpoint Industrial Estate the company is developing at Oldham, Greater Manchester, where Partington is based.

Recent successful tenders include one for 159 dwellings at Warrington New Town (over £2m) and two for warden-controlled old persons' flats at Oldham, together valued at better than £1.1m.

A £¾m home improvement scheme for Oldham Metropolitan Borough just started at Delph, Saddleworth, follows several similar contracts in various parts of Greater Manchester.

Bovis busy in France and UK

MARKS AND SPENCER has awarded Bovis Construction a contract, valued at about FFr 40m, for the construction and fitting out of a 10,000 square metre warehouse at Aulnay-Sous-Bois, near Paris.

Scheduled for completion in July 1980, the warehouse will serve Marks and Spencer's Paris store. It will provide two-level storage of merchandise, plus cold rooms, office accommodation and staff amenities. The main warehouse area will be served by twin lifts.

A.E.S. International, are the architectural and engineering consultants and the quantity surveyors are Widnall and Trollope.

Working with Bovis on this project will be the company's joint venture partner, SAE (Societe Auxiliaire D'Entreprises). Previous Marks and Spencer contracts carried out by the SAE/Bovis partnership include stores at Boulevard Haussmann, Paris, Rosny II, an eastern suburb of the French capital and at La Part-Dieu shopping centre in Lyon.

Back in the UK and following its start of a new refuse baling plant at Bradford, Yorkshire, Bovis Civil Engineering has been awarded a second major public works contract in the city for a £2.8m extension to Chellow Heights water treatment plant.

Contracting at Avonmouth is valued at £609,500 and includes demolition of an existing customs shed and construction of a steel-framed asbestos clad warehouse building together with offices and hard standing area.

Built by Bovis Construction 12 years ago the James Beattie department store in Dudley, West Midlands, is now to be given a new top floor under a contract worth about £650,000. Alterations to the store's existing lower floors include the provision of two new staircases and the reinstatement of storage areas.

The extension will have a steel frame with Durox pre-cast concrete slabs and a mansard roof and will provide an additional 12,000 sq ft. Architects for this contract are the Harry Weedon Partnership.

Monk wins £5m worth

FOUR contracts to A. Monk and Co., totalling over £5m, are located at Northampton, Leeds and Selby. Over £46m worth of contracts have been secured by this group since March.

First of the new work is for the Northampton Borough Council and is a continuation of the Nene Valley Way high-speed trunk road, two stages of which were previously constructed by Monk in 1973 and 1976. Stage 3 is a £3,356,918 project, 2.3 km long, near to the River Nene east of Northampton.

It will be of two-lane dual construction with a grade separated junction and seven structures—two underpasses, two road bridges and three footbridges.

A second contract is for Northampton Development Corporation for the building of 51 old persons' dwellings at Ecton Brook.

At Leeds, for Sulzer Brothers (UK), earthworks and associated drainage at Mill Shaw site will cost £300,000 plus.

At Selby, National Coal Board has accepted a £534,000 tender for alterations to public roads and the construction of oil and grit interceptors at the Whitmoor shaft site.

£3m factory in Wales

THE WELSH Development Authority has awarded a £3m contract to Sir Robert McAlpine and Sons for the building of a factory on the Kingsway Industrial Estate, Bridgend, for use by Sony.

The factory will have a steel-framed structure, measuring 155 metres by 55 metres, and there will also be an adjacent facilities block measuring 51 metres by 48 metres.

Work is now starting with completion programmed for late-summer 1980. Architects are Holder and Mathias Partnership.

Distribution centre

European distribution centre for Crosby Doors of Farnham will cost £3m and will cover over 140,000 square feet.

Project management of the contract will be carried out by Client Construction Company. Groundworks have been let to Rush and Tompkins (Parsons) and the steel frame and cladding to Conder Midlands.

Crosby (member of the Montague L. Meyer Group) says that the new building will incorporate the latest techniques of narrow aisle storage and retrieval, order picking and loading, with fully computerised systems of stock location, route planning and order processing.

Rail depot at Clacton

BRITISH Railways Board, Eastern Region, has awarded a £1m contract to Tilbury Construction for the construction of a steel frame, aluminium-clad servicing and maintenance shed at the EMU train depot at Clacton Station, Essex.

The structure will be approximately 104 by 20 metres and the works include the provision of rail tracks and platforms. An extensive paved car park area and roads, a gas bottle store, associated drainage, services and site work are also called for in the contract.

Swaffham bypass

DEPARTMENT of Transport has accepted a tender for nearly £3,380,000 for road works from Reed and Mallik.

It covers the reconstruction of a 4¾-mile bypass from Swaffham, Norfolk, on the A47, at present a traffic bottleneck during the summer when thousands of holidaymakers head from the Midlands and the North to the East Anglian coast and the Broads.

Work will take two years to complete.

Border wins £3¼m work

MEMBER OF the London and Northern Group operating mainly in the north west of England, Border Engineering Contractors has been awarded contracts exceeding £3.25m.

These include the construction of the effluent treatment works and pumping station at Workington for Thames Board Mills; the laying of the industrial water supply to Thames Board Mills and the trunk main Frizington/Cleator Moor for the North West Water Authority.

£2m awards to C. Bryant

THREE PROJECTS, together worth £2m, have just been announced by C. Bryant and Son's building division.

Largest job is the second phase of a project at Heathrow International Trading Estate, worth more than £1m.

Second contract, worth about £½m, is to build a two-storey teaching block and a steel framed sports hall at Brownhills Comprehensive School on behalf of Walsall Council.

Final work, worth £400,000, is for British Leyland and involves alterations, including demolition of structural walls and erection of new steel columns at BL's Gravelly Park industrial site at Erdington.

Will build warehouses

TWO CONTRACTS for warehouses totalling £2.4m have been won by Fairclough.

The larger is a 15,000-square-metre development comprising three warehouses on the Griffin Industrial Estate at Totton, near Southampton. This is on behalf of the Midland Bank Pension Trust for whom JLW Project Services is acting as project co-ordinator. Value of the contract is £1¾m and the scheme has been designed by the Maurice Baguley Design Partnership.

The other contract, worth £680,000, has been placed by London and Leeds Investments.

IN BRIEF

● Christiani and Nielsen has started work on Contract 11 of the Thames Flood Prevention Scheme at Thamesmead under an £8.4m contract awarded by the Department of Public Health Engineering of the GLC.

● Extensions to the Nestle distribution centre at Picketts Lock Lane, Edmonton, London N9 will be undertaken by Willment Bros. under a contract worth £¾m.

● A £600,000 contract for the supply of structural steelwork for a major new GPO parcels centre at Leeds has been won by Robert Watson and Company of Bolton.

● Higgs and Hill Northern has been awarded a £480,000 contract for the construction of a five-storey office block in St. Paul's Street, Leeds for French Kier Developments.

MANAGEMENT

EDITED BY CHRISTOPHER LORENZ

Ford sees its target for the 1980s as production of a 'rational' car

BY KENNETH GOODING

Donald Petersen, executive vice-president.

The third article in a series on the concept of a world car looks at the reaction of Ford to the strategy of its major U.S. competitor and the way it has already put plans in hand for a new phase in its world car programme.

"FORD IS *not* in a state of shock because one more major competitor is making a run at world markets"— so says Donald Petersen, the Ford executime vice president with responsibility for international *automotive operations. He* shows mild amusement at the idea that Ford should in some way step up its own activities simply because General Motors, its major domestic rival, is currently putting much well-publicised emphasis on its overseas business.

Protocol forbids Ford's or General Motors' managers making public statements about the competition. But when pressed Mr. Petersen suggests there are some very good reasons for believing that GM will not be able to solve the problems it faces outside North America simply by throwing lots of money at them.

"First you need people with a depth of international experience. U.S.-based managers are used to a stable environment because we have a stable Government and a three-year contract with the unions with the force of law behind it. Outside North America managers have to adapt to the unpredictability of markets yet sustain their efforts.

"You need a breed of skilled and sensitive managment to handle this kind of assignment."

And any company building up international operations also needs a healthy dealer network to take care of retail car sales, Mr. Petersen points out. The good dealers in most parts of the world are already committed to one particular manufacturer's products and will not be easily prised away.

So it takes time for a group to build up its international operations. And it can take even longer before the work put in begins to pay off in financial terms.

Mr. Petersen maintains: "While this year's investments are making the news, the even greater investments made over a much longer period of time are just now beginning to bear fruit for those companies which had the determination and foresight to invest carefully and steadily over the last decade and a half. These investments are not just in plants, but in sound, experienced management, strong and broad dealer networks and cars and trucks designed to serve the varied markets of the world.

"It is time-consuming, and the returns on investments do not come immediately. Only in the past few years have Ford's overseas operations really begun to return the investment we have committed to our overseas affiliates, many of which have celebrated the 40th, 50th or 60th and, in one case soon, 70th anniversaries of their formal founding."

But then it has only been in fairly recent times that automotive market growth outside North America overtook that in the U.S. and Canada. Between 1968 and 1977 while the North American market was growing at around 2.5 per cent a year, the market outside was showing a 4 per cent improvement.

Ford in particular has been able to offset its recent problems in the volatile U.S. market by its overseas operations. The contribution of what are termed "international automotive operations" to total group profits before taxes rose from 7 per cent in 1971 to more than 50 per cent in 1978.

It can be argued that the Model T was the first "world car." In 1911, only eight years after the Ford group was founded, it was being built in Manchester, England, and became England's best-selling car the next year. In 1913 assembly began in France and in 1916 the first Latin American car assembly plant was built in Argentina. Between then and 1925 new assembly plants were started in Denmark, Spain, Brazil, Uruguay, Italy, Belgium, Sweden, Chile and Japan.

Through Ford of Canada, the Model T penetrated the British Empire with assembly in Australia, New Zealand and South Africa. By 1924 Ford had built and sold 10m Model Ts.

Today the Model T tradition is being followed by the Cortina (built in four countries and exported to 100), the Escort and the F-series trucks.

This is possible because Ford has long been established on the five continents and organises its production to reap the economies of scale this provides. Two years ago Sir Terry Beckett, chairman of Ford UK, gave an indication of just how large these economies had become. He explained that Ford had compared the costs of producing a Cortina with those of producing a competitor close in terms of design, but only being built at a third of the Cortina's volume. The difference in cost, attributable to economies of scale only, was £170 per car.

Further stage

But in the 1980s Ford will take the "world car" concept a stage further, to what Mr. Petersen calls the "rational car." "There will be many reasons behind their varied levels of appeal and performance from country to country. They are likely to be vehicles with varying levels of common components and often great similarity of design. But still there will be enough locally appealing features to make them desirable with customers in widely differing markets."

New vehicles being planned for the 1980s will have to be built not only multinationally but inter-regionally. "By encouraging specialised high-volume manufacture and sourcing of parts and components among countries contributing to a final Ford product we hope to obtain superior quality as well as economies of scale that will mean competitive prices for Ford vehicles."

The Ford Fiesta, the smallest car in its range and its first with front-wheel drive.

Mr. Petersen insists that the "rational car" holds advantages both for the companies and the countries that share in its manufacture.

"For manufacturers it allows great savings by reducing complexity and costs and substantially raising the overall quality of the product round the world. It brings to countries with what we call 'orphaned' products the newest and best in automotive technology, replacing older designs which otherwise we could not afford to change."

In this context he points out that, although Ford has no assembly facilities in France, it has a major presence in the automotive industry there through its Bordeaux transmission plants.

Mr. Petersen maintains that there is a price to pay for this new way of operating and that price "may involve giving up the luxury of self-sufficient domestic industries surviving behind artificial barriers of tariffs and local content regulations."

Ford will have to spend about \$20bn between 1978 and 1985 to produce cars and trucks which will meet the stringent U.S. Government regulations. Although the group would prefer not to have to spend so much so quickly, by doing so it will create a global pool of technology and expertise that will be shared by all Ford companies around the world.

The pressures have made it worthwhile for Ford to set up computer links between its design and engineering teams in the U.S. and Europe so that they can compare notes quickly.

Ford's first "rational" car will not be on the road until about 1984. Meanwhile it will go part of the way down the route with the Erica, due next year to replace the Escort in Europe and the Pinto and Bobcat in the U.S. Erica will play a vital part in helping Ford meet the corporate fuel economy figures set by the U.S. Government but observers in the U.S. maintain it will not make one cent in profit.

Mr. Petersen admits: "It is difficult to make money on small cars in the U.S. because it is an open market and the Japanese have set the going prices." But he insists the Erica will be profitable in Europe.

In spite of its long history of international activity, Ford has still to complete one important piece of tidying-up. It is in the process of buying 25 per cent of Toyo Kogyo, Japan's fourth-largest car producer and number three in the commercial vehicle league, for around \$55m.

Mr Petersen says the deal will achieve two things. It will cement the commercial arrangement between the companies—Toyo Kogyo, the Mazda car group, will supply Ford with manual front-drive transaxles for Erica and may also sell four-cylinder diesels for use in the same vehicle. An equity link will also help oil the wheels when the two groups get down to developing components jointly.

- Sales in 1978 outside North America—\$13bn (\$11.2bn).
- International Automotive Operations (IAO) net income in 1978—\$770m (\$705m).
- IAO's contribution to worldwide pre-tax profit rose from 7 per cent in 1971 to over 50 per cent in 1978.
- IAO accounts for more than one in every four dollars of Ford's worldwide sales.
- IAO accounted for more than one-third (\$8.3bn) of Ford's total net assets in 1978.
- IAO has 46 major manufacturing and assembly facilities in 18 countries, with 80m square feet under cover.
- IAO employs more than 200,000 people, 45 per cent of total number of employees worldwide.
- Ford products are sold in about 200 countries and territories by about 14,000 dealers.

Validity

Then, although Ford is doing quite nicely in the Asia-Pacific area, it must be assumed that if the "rational car" concept has any validity Japan will remain the primary manufacturing base for the area. "The economical producers are based in Japan so in the long run we have to assume that the present restrictions in the Asia-Pacific countries will diminish and the fundamental economics will come into play," says Mr. Petersen.

On its domestic doorstep, in Latin America, last year Ford had combined car and truck leadership in Argentina and Venezuela and truck leadership in Mexico. It has decided to pump another \$76m over the next two years into Argentina to expand capacity and upgrade the products, a decision taken after General Motors decided it had had enough of manufacturing there and pulled out.

Both Brazil and Argentina have developed "internal" industries with high local content requirements and Ford, operating in both countries, has had to adapt to that. But there is potential for a good degree of co-operation between the two countries, Mr. Petersen maintains. "Argentina is aware how high-cost and inefficient its industry has become because Ford co-operated with the government to show how a closed type of industry led to this. So new regulations have been promulgated and this will generate some activity and possibly some co-operation between Argentina and Brazil."

Ford is also ready to adapt to the requirements of the Andean Pact countries — of which Venezuela is a prominent member—as they develop.

Europe remains the backbone of Ford's overseas operations and an area in which substantial investments continue to be made—\$300m on the Bridgend engine plant in Wales due on stream soon; \$700m over the next five years on engineering and product development in Germany, and \$1.8bn in Britain (including Bridgend) between 1978 and 1982 to increase capacity at Halewood in the immediate future, among other things.

But Ford has, amid huge publicity, decided not to go ahead with a new plant in Europe.

Mr. Petersen says the question had always been whether Ford should first expand its existing European plants then follow with "greenfield" development or go for the "greenfield" site first and then expand the current plants.

"The trouble is that when you are looking at the potential for greenfield sites in countries where you are not doing business at the moment it catches the public's eye. We did that part of the exercise in a goldfish-bowl type atmosphere.

"So when we finally decided not to go for a greenfield operation we thought we had better say so publicly and quickly."

Mr. Petersen insists that the decision was taken by Ford of Europe and that only after a final European expansion scheme has been drafted, probably in September, will the Ford main board be asked to give a decision.

He adds that Ford of Europe has done some recalculations in the light of what has happened in Iran. "We felt we had to put some weight on that factor in projecting future growth. We also re-examined financial cost projections."

(His current projection is that world passenger car demand over the next ten years should rise by about 30 per cent and truck demand should continue to be strong.)

Mr. Petersen insists that "in the long haul" Ford will be spending more on its overseas operations than General Motors.

Because Ford has had to find so much cash for the changes in the U.S. it is rumoured that the group has banned all export of capital from the States for the time being. Mr. Petersen points out that in the past ten years \$3bn was spent on the overseas operations—"all the cash was going in the other direction."

He expects competition outside North America to become progressively fiercer: not only because General Motors is now making a determined effort to improve its market share but because all of the top eight automotive groups are elbowing each other in an attempt to give themselves more room. A whole range of joint ventures will enable those smaller groups of less than 2m-units a year to fight on the world battlefield.

"Because of the huge sums needed to stay competitive, we are becoming accustomed to dramatic alignments and joint ventures with local capital. Some of these alignments seem to prove that it has now become cheaper in many countries to buy plants than to build them," Mr. Petersen suggests.

"Ironically, it may be that during the next decade some companies will be getting bigger in order that their cars become smaller."

Wilson proposals 'will not revitalise firms'

WHILE THE interim report published by the Wilson Committee on financial institutions earlier this year has helped to draw attention to some of the problems of independent businesses "it falls a long way short of a comprehensive package capable of restoring the sector's viability."

This is the view of the Association of Independent Businesses, an organisation which represents about 25,000 firms and which claims to number among its ranks one-quarter of those companies in the UK which have a turnover of over £1m.

The association's comments are contained in an assessment, published today, of the Wilson Committee interim report. Its criticisms and recommendations produce no real surprises. For example, the association reckons that, in contrast to the Wilson view, a bias against smaller firms does exist, and it also argues that any fresh sources of external capital for small companies, or any loan guarantee schemes should be administered in the private sector, rather than by government.

The AIB strongly insists that the Wilson Committee's terms of reference should have allowed it to appraise the effects of taxation on smaller companies. Indeed, it suggests that the new Government might even alter the committee's guidelines so that, before it produces its final report, it might make some recommendations in this area.

The omission by Wilson of any consideration of taxation effects was essentially due to the subject being considered "political." The AIB, however, maintains that there are a number of questions about tax which are not at all political. "The size of the tax take is a political choice; quite separately there is an efficiency choice to be made about the way any given tax take is gathered," it says.

Discussing the problem of bias against small firms, the AIB cites the Wilson Committee conclusion that such problems experienced by that sector as greater costs of loans, greater scarcity of external equity and minimum qualifying level in Government support schemes or export credit facilities do not necessarily constitute a bias. The AIB remarks: "We cannot agree; any structure which assists one part of industry and commerce more easily than another is by definition biased against the latter."

The financial bias must be acknowledged, but not by reorganising the well-tried financial structures which serve other purposes well. Instead, there should be a complementary bias elsewhere in the system.

A more liberal lending policy among the clearing banks should also be encouraged, says the association. Provided the first money at risk is always the proprietor's, a bank could go somewhat further than it does at the moment.

The association wants a rather different form of financial intermediary to channel equity into independent business than that suggested by Wilson. It cites the U.S. and outlines a three point system as being worthy of consideration.

This system which has for the most part already been widely discussed—would allow Small Firms Investment Companies to take in privately subscribed capital; to augment capital subscribed as risk-bearing equity with borrowings up to three times the equity subscription; and give the right to change any losses arising on the realisation of such investment against income tax.

Nicholas Leslie

LOMBARD

Fastnet's tragic economics

By ANTHONY HARRIS

THE Fastnet Race has been tragedy enough; but the public reaction to it would well prolong the agony for all who love sailing. It is likely to reinforce the drift towards official interference in what is the freest of recreations and the most complete escape from City pressures that many of us can imagine. Yet the comment which has so far appeared seems to suggest interference of the wrong kind—banning small boats, interfering with the running of races; in short, as usual, seeking scapegoats and treating symptoms.

Philosophy

In fact a tragedy of this kind has been waiting to happen for some time. The reasons are partly technical—and so far as they are technical, they have already been attacked by the racing authorities, with results which should become apparent in future designs. However, the reasons are also partly related to the philosophy, one could almost say the economic philosophy of the sport, and that has not changed radically. For the good of the sport, perhaps it should.

The elite of sail racing has always been and remains a sport for the very rich, since the days when Sir Thomas Lipton devoted some of the millions he had made in making retailing efficient (and incidentally cutting the urban cost of living by about a third) on campaigning his magnificent J-class yachts. The sailors in those days were largely professional; the rich contributed the yachts.

Ocean racing has happily become an amateur sport so far as the crews are concerned; but money remains at the root of it. The races are sailed under handicapping rules of the greatest complexity, which are intended to allow and to encourage innovation. Indeed, no serious contender can be designed these days without a computer analysis of the rules, to calculate the trade-offs between the handicaps applied to various features and dimensions, and the possible speed to be gained, and probably the consultancy of a hydraulic research station too.

This process is naturally very expensive: but racing under restricted rules has been "democratised" by applying the same approach to progressively smaller boats. Within each class, however, it remains true that money has a lot to do with who wins the race. It is virtually never won by an old boat.

In two ways, this approach has courted danger. First, the actual rules have encouraged the development of what are in effect oversized racing dinghies, which skim over the water rather than cleaving through it. Such boats encourage the running of risks; for whereas traditional craft actually go slower if they are carrying excessive sail, as they wallow through the water, skimmers can be driven to the limit.

This fact should involve discomfort rather than risk to life in sound design, but competitive innovation has a further effect: the fine speed margins required depend on cutting weight and underwater drag to a bare minimum, slimming down keels, steering assemblies and rigging to the point of fragility. Designers as well as helmsmen run risks.

This seems to me still to attack the symptom rather than the cause. It is surely regrettable that sailing is made into such a money-sport by its rules, and effectively reserves the prizes for those who can afford a new craft to a new design each season. There is a clear alternative: the Olympic approach, seen equally in all dinghy classes, in which the major awards are won in classes of craft as near as possible identical, and are won solely by care in preparation and skill at the helm.

More sporting

Equally important, risk-taking at the design stage is effectively ruled out. If a class is to be built in hundreds, nothing must be fragile; the need for modifications and their cost would discredit the class. There is no good reason why such classes should not reflect modern thinking on fast sailing as it develops; the risks involved can be limited.

What is really lacking, however, is prestige. Here both the sailing authorities and those who spend such fortunes on their own competitive efforts could help. Sponsorship of a top class for one-designs would soon establish its prestige if it could attract the support of those who have a vested interest in the present more exclusive approach, and perhaps a fraction of the money they spend. All-comers' races would then remain simply what they once were—a bit of fun. In this way, not only would lives be saved, but the sport of kings would be more sporting.

Lessons from the Rossminster case

THE WEEK IN THE COURTS

By A. H. HERMANN, Legal Correspondent

THE SECOND ACT of the Rossminster drama* was concluded last week in the Court of Appeal by a judgment which gratified not only those who like to see the tax man defeated but also those with a wider concern for the protection of the citizen against abuse of bureaucratic power.

Yet one cannot escape the impression that the effect of the judgment will not really achieve the admirable objectives which the three appeal judges so clearly expressed. Moreover, the third and final act of the drama will only take place in the House of Lords and it is by no means certain that the judgment of the Court of Appeal will be then confirmed in its full extent, or at all.

Excessive taxation encourages both legal tax avoidance and illegal tax evasion. At the same time, the particulary clumsy and complicated way in which tax laws are drafted provides innumerable loopholes for legal tax avoidance.

Tax payers with very high incomes feel obliged, not only by self-interest but often by a sense of duty to their shareholders and employees to use every possible loophole of the law to avoid paying more tax than is absolutely necessary. Her Majesty's Inspectors of Taxes feel no less duty bound, not only to stop illegal tax evasion but also to plug any holes in the law which help tax avoidance.

One can assume that in addition to helping with the investigation of suspected tax offences, the raid on the Rossminster premises could also yield information about the clever legal schemes that are being used by such successful practitioners. Without knowing about them the Inland Revenue can hardly propose legislative changes which would stop them.

The Revenue officers who carried out the raid in the early hours of July 13 were no Gestapo-type guerrillas but, as Mr. Plummer, one of the victims, testified "very nice chaps." One can hardly assume that the two Commissioners of Inland Revenue who authorised the operation could be described in any other terms. Yet circumstances seem to have prompted them to a "military-type" operation which ended in removing, *a la rinfusa*, lorry loads of ducuments, some of which could possibly be used as evidence, if indeed there was any offence committed, and some of which had no relation to tax matters at all. And they have done so on the basis of warrants obtained the night before from a circuit judge and referring in the broadest of terms to the suspicion of an unspecified tax offence.

In a narrowly technical sense the judgment rested on the interpretation of the statute law which enables the Inland Revenue to obtain from a judicial authority a search warrant if it can satisfy the judge that it has information justifying the suspicion of a tax offence.

Mr. Justice Walton, to whom Rossminster appealed in the first instance, took the view that the warrant need not say any more than just that. The three judges of the Appeal Court took a different view and, relying on previous judgments of the House of Lords and of the Court of Appeal, reaffirmed that it is a basic tenet of the English law that whenever a statute speaks so vaguely about "an offence" it should be read as implying the condition that when the statutory provisions are applied, the offence must be sufficiently specified to allow for judicial review.

Such a general implication, which is not much different from the generally accepted requirement that all decisions of administrative authorities must show reasons which moved those who made them, is of great general importance and equivalent to a constitutional rule of countries which have written constitutions and Bills of Rights.

However, until one has seen the transcript of the judgment (which is not yet available) it will remain unclear how detailed a definition of the offence is required by the Court of Appeal. If what is required is, to use Lord Simon's dictum of 1947, "specification of particulars of the offence," the decision may go a long way in protecting the citizen against fishing expeditions by the authority. If however, the appeal judges would be satisfied with the naming of one or several of the six categories of tax offences this would hardly help. Though these six categories include the specific offences of false accounting, forgery and perjury, they also include the very broad categories of evading tax liability and conspiring to defraud and cheat. The last offence is broad enough to support any fishing expedition.

It seems to be also well established by previous decisions of the Court of Appeal, particularly in *Ghani v Jones* that a police officer conducting a search under common law for suspicion of an arrestable offence can also seize objects which he thinks could serve as evidence for another offence. This may have been on the mind of Lord Justice Goff when he underlined that the Rossminster decision of the Court of Appeal does not imply that the search is invalidated whenever the officers take more than is strictly justified by the suspected offence specified in the search warrant.

It all depended, he said, on the way it was done. A particularly oppressive performance of the search shifted the burden of proof that the seizure was really necessary on to the authority, in this case the Inland Revenue. As the Inland Revenue refused to offer such evidence in the Court of Appeal, the appeal judges felt there was no choice for them but to quash the warrant and to order the return of the documents.

The oppressive effect of the excessive zeal with which the search of the Rossminster premises was carried out is therefore the second leg on which the decision of the Court of Appeal rests, the first being that the warrant was bad as it did not specify any offence.

But can a ruling of even the highest court of the land achieve a remedy where the problem springs from the increasing complexity of business — making it often impossible for an officer carrying out a search to determine on the spot whether it is "reasonable to believe" that a certain piece of paper will be needed as evidence of a suspected offence. Even experienced accountants may take weeks to establish discrepancies between such records.

One can hope that the House of Lords, to whom Inland Revenue will appeal, will clarify some of these issues. But a real remedy can come only from changing the method of tax legislation and of tax enforcement. Legislation should bring out more clearly the substantive intention of Parliament and shed the complicated cross-references which aim at precision but achieve obscurity.

Enforcement, it should be realised, is mainly concerned with a relatively small number of very large taxpayers. And here prevention might be better than cure: a system of regular audits and consultations in which Tax Inspectors were represented would not only take a better account of the rule that people should be considered innocent as long as they are not proved guilty, but might — as German experience shows — achieve also significant results for the Inland Revenue.

* *Court of Appeal, London. Rossminster Group and others v. Commissioners of Inland Revenue, judgment of August 16, 1979, unreported.*

Troy set for massive gamble over 10½ furlongs at York

RACING

BY DOMINIC WIGAN

THERE IS little doubt in my mind that the connections of Troy are taking one of the most massive gambles seen in racing history in saddling the dual Derby winner over 10½ furlongs at York tomorrow.

A colt who takes a long while to get into full momentum and one who was not only helped by a slightly ill-judged late bid by Gay Mecene's pilot at Ascot, where a stumble also did not help the cross-Channel raider, Troy will undoubtedly need a fast early pace tomorrow if he is to win.

Brian Proctor, second stable jockey and the subject of unfair criticism over his riding in the King George VI and Queen Elizabeth Diamond Stakes in which Road to Glory was simply not up to setting the required pace, again bids to fulfil that role on the Sir Gaylord four-year-old.

With Lyphard's Wish, among others, almost sure to take them along at a blistering pace from the outset, I see little need for Road To Glory's presence, who seems ill-equipped for the role.

Those likely to take on Troy in the £50,000 renewal of the Benson and Hedges race include Gay Mecene, Swiss Maid, Gain, Noelino and Manguin.

The reasoning behind Troy's presence looks obvious. Although some reports suggest that breeders have been eager to snap up shares at £180,000 each (valuing Troy at £7.2m), a victory would undoubtedly encourage those still uncommitted to back the stallion prospect and—hopefully—ensure his presence at stud in Britain rather than in the U.S.

But for the fact that connections clearly want to impress those still sitting on the fence that Troy has the speed to take on and beat the best over tomorrow's trip, I feel sure the race would not have been on Troy's itinerary.

Apart from that it is hardly an ideal ingredient in an Arc de Triomphe build-up, the Benson and Hedges race is one that Hern would, in normal circumstances, have avoided with a colt who needs at least one and a half miles to be seen at his best.

It was in the initial running of this race in 1972 that Hern's Brigadier Gerard met his one defeat in 18 races. Since then such odds-on chances as Rheingold, Grundy and Trepan have come unstuck.

LEICESTER

4.50—Cavalry Cut
5.20—Karlinsky***
5.45—Lombardia**
6.35—Jester's Boy*

TV/Radio

BBC 1

† Indicates programme in black and white

6.40-7.55 am Open University (Ultra high frequency only). 9.50 Magic Roundabout. 9.55 Jackanory. 10.10 Don and Pete. 10.15 Desert Adventure. 10.35 Take Hart. 11.25 Cricket: Third Test—England v India. 1.30 pm Trumpton. 1.45 News. 2.05 Cricket: Third Test. 4.18 Regional News for England (except London). 4.20 Play School (As BBC-2 11.00 am). 4.45 Jigsaw. 5.10 Big John, Little John. 5.35 The Wombles.

5.40 News.
5.55 Nationwide (London and South East only).
6.20 Kick Start.
6.50 Ask the Family.
7.15 Explorers of the Deep.
8.05 "Grand Prix" starring James Garner (part 1).
9.00 News.
9.25 "Grand Prix" (cont.)
11.15 World of Panorama.
12.05 am Regional News.

All Regions as BBC-1 except at the following times:—

Scotland—5.55-6.20 pm Reporting Scotland. 12.05 am News and Weather for Scotland.

Wales—1.30-1.45 pm Pili Pala. 5.55 Wales Today. 6.15-6.20 Newyddion. 6.50-7.15 Tomorrow's World. 12.05 am News and Weather for Wales.

Northern Ireland—4.18-4.20 pm Northern Ireland News. 5.55-6.20 Scene Around Six. 12.05 am News for Northern Ireland.

England—5.55-6.20 pm Look East (Norwich); Look North (Leeds, Manchester, Newcastle); Midlands Today (Birmingham); Points West (Bristol); South Today (Southampton); Spotlight South West (Plymouth).

BBC 2

6.40-7.55 am Open University.
11.00 Play School.
4.30 pm Cricket: Third Test.
6.30 Open University.
6.55 Pick of the Philpott File.
7.50 Mid-Evening News including sub-titles.
8.00 Ten on Two.
8.10 The Waltons.
9.00 Larry Gatlin Sings Country.
9.25 The Jacob Bronowski Memorial Lecture.
10.15 Best of Brass.
10.50 Return Call to Brass Tacks.
11.05 Cricket: Third Test (highlights).
11.35 Late News.
11.50 Closedown reading.

LONDON

IBA programmes are subject to interruption because of industrial action

9.30 am Beyond the Moon? 10.00 am The Regions Report. 10.30 Cartoon Time. 10.45 To the Wild Country. 11.35 The White Stone. 12.00 Jamie and the Magic Torch. 12.10 pm Rainbow. 12.30 Emmerdale Farm. 1.00 News, plus FT Index. 1.20 Thames News. 1.30 All About Toddlers. 2.00 Rumpole of the Bailey. 3.00 Monday Matinee: "Killer Bees." 4.20 Clapperboard. 4.45 Why Can't I Go Home? 5.15 Survival. 5.45 News.

6.00 Thames News.
6.05 Thames Report.
6.35 Crossroads.
7.00 Britain's Strongest Man.
7.30 Coronation Street.
8.00 Spooner's Patch.
8.30 World In Action.
9.00 Best Sellers: "Studs Lonigan."
10.00 News.
10.30 Best Sellers (continued).
11.15 Thriller.
12.30 am Close: Gai Eaton with readings from the Islamic tradition.

All IBA Regions as London except at the following times:—

ANGLIA

10.30 am Andy's Party. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar and the Great Wooferoo. 1.25 pm Anglia News. 2.00 Houseparty. 2.25 The Love Boat. 3.20 Rumpole of the Bailey. 5.15 Get Some In! 6.00 About Anglia. 11.15 Doctors' Private Lives. 12.15 am Reflection.

ATV

10.30 am Dick Tracy. 10.35 Sesame Street. 11.25 Ghost Busters. 1.20 pm ATV Newsdesk. 3.00 Movie Matinee: "Terror On A Train." 6.00 ATV Today. 11.50 Happy Birthday Basie. 11.50 Something Different.

BORDER

10.30 am Andy's Party. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.50 Oscar and the Great Wooferoo. 1.20 pm Border News. 2.00 Houseparty. 2.25 Fireside Theatre. 3.20 Rumpole of the Bailey. 5.15 Cabbages and Kings. 6.00 Lookaround Monday. 6.20 The Sound of . . . The New Seekers. 11.15 The Do-Gooders. 12.00 Barney Miller. 12.30 am Border News Summary.

CHANNEL

1.20 pm Channel Lunchtime News and What's On Where. 3.00 The Monday Matinee: "Top of the Form." 5.15 Cabbages and Kings. 6.00 Channel News. 10.28 Channel Late News. 11.15 Family. 12.10 am News and Weather in French.

GRAMPIAN

9.30 am First Thing. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.50 Oscar and the Great Wooferoo. 1.20 pm Grampian News Headlines. 3.00 Monday Matinee: "Let's Switch." 5.15 Out of Town. 6.00 Grampian Today. 6.05 Flair. 11.15 Reflections. 11.20 Survival Special. 12.20 am Grampian Late Night Headlines.

GRANADA

10.30 am Sesame Street. 11.25 Valley of the Dinosaurs. 11.45 A Handful of Songs. 1.20 pm Dick Tracy. 3.00 Monday Matinee: "River of Gold." 5.10 Felix the Cat. 5.15 Crossroads. 6.00 Granada News. 6.05 The Rohde Reports. 6.30 Get Some In! 11.15 Colgate World Mixed Golf Championship.

HTV

10.30 am Andy's Party. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar and the Great Wooferoo. 1.20 pm Report West Headlines. 1.25 Report Wales Headlines. 3.00 Monday Matinee: "Nicky's World." 5.15 Little Red Riding Rabbit. 5.20 Crossroads. 6.00 Report West. 6.22 Report Wales. 11.15 Michel Legrande and Friends.

HTV Cymru/Wales—As HTV General Service except: 1.20-1.25 pm Penawdau Newyddion Y Dydd. 6.00-6.22 Y Dydd.

HTV West—As HTV General Service except: 1.20-1.30 pm Report West Headlines. 6.22-7.00 Report West.

SCOTTISH

10.30 am Andy's Party. 10.55 Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar. 1.25 pm News. 3.00 Monday Matinee: "Blood Sport." 5.15 Popeye. 5.20 Crossroads. 6.00 Scotland Today—Summer Extra. 6.30 Crimedesk. 6.45 The Sounds of . . . Rickie Lee. 11.15 Late Call. 11.20 Festival Cinema.

SOUTHERN

10.30 am Andy's Party. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar and the Great Wooferoo. 1.20 pm Southern News. 2.00 Houseparty. 2.25 The Love Boat. 3.20 Rumpole of the Bailey. 5.15 Dick Tracy Cartoon. 5.20 Crossroads. 6.00 Day By Day including Southsport. 11.15 Southern News Extra. 11.25 The Entertainers (Tony Monopoly). 11.55 Farm Progress.

TYNE TEES

9.25 am The Good Word followed by North-East News Headlines. 10.30 Andy's Party. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar and the Great Wooferoo. 1.20 pm North-East News and Lookaround. 3.00 Monday Matinee—"Mrs. Sundance." 5.15 The Best Disco In Town. 6.00 Northern Life. 11.15 Jazz Night—"Count Basie." 11.45 Greatest Fights. 12.00 Police Surgeon. 12.35 am Epilogue.

ULSTER

10.30 am Andy's Party. 10.55 Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar. 1.20 pm Lunchtime. 3.00 Monday Matinee: "Terror on a Train," starring Glenn Ford. 4.18 Ulster News Headlines. 5.15 Cartoon Time. 5.20 Crossroads. 6.00 Ulster Television News. 6.15 Family Matters. 6.30 The Mary Tyler Moore Show. 11.15 Colgate World Mixed Golf Championships. 12.15 am Bedtime.

WESTWARD

10.30 am Andy's Party. 10.55 The Exeter Maritime Museum. 11.20 The Paper Lads. 11.45 Oscar and the Great Wooferoo. 12.27 pm Gus Honeybun's Birthdays. 1.20 Westward News Headlines. †3.00 The Monday Matinee: "Top Of The Form," starring Ronald Shiner. 5.15 Cabbages and Kings. 6.00 Westward Diary and Sports Desk. 10.28 Westward Late News. 11.15 Family. 12.10 am Faith For Life. 12.15 West Country Weather and Shipping Forecast.

YORKSHIRE

10.30 am The Herbs. 10.45 Canada-Five Portraits. 11.35 The Roman Holidays. 1.20 pm Calendar News. 3.00 Untamed Frontier. 3.20 The Sullivans. 5.15 University Challenge. 6.00 Calendar (Emley Moor and Belmont editions). 11.15 The Do-Gooders. 12.00 Barney Miller.

RADIO 1

5.00 am As Radio 2. 6.00 Andy Peebles. 9.00 Simon Bates. 11.00 Radio 1 Roadshow. 12.30 pm Newsbeat. 12.45 Paul Burnett. 2.00 Tony Blackburn. 4.31 Kid Jensen. 7.00 Stayin' Alive. 8.00 Mike Read. 9.50 Newsbeat. 10.00 John Peel (S). 12.00-5.00 am As Radio 2.

RADIO 2

5.00 a.m. News Summary. 5.03 Derek Hobson (s). 7.32 Terry Wogan (s). 10.03 Jimmy Young (s). 12.15 p.m. Waggoners' Walk. 12.30 Pete Murray's Open House (s). 2.15 David Hamilton (s). 4.15 Much More Music (s). 5.00 News. 5.05 Waggoners' Walk. 5.20 Don Durbridge (s). 6.45 Sports Desk. 7.02 Music from the Movies (s). 7.30 Sports Desk. 7.33 Alan Dell with The Dance Band Days, and at 8.02 The Big Band Sound (s). 9.02 Humphrey Lyttelton with The Best of Jazz on records (s). 9.55 Sports Desk. 10.02 Funny You Should Ask. 10.30 Star Sound. 11.02 Brian Matthew with Round Midnight from Edinburgh, including 12.00 News. 2.02-5.00 a.m. You and the Night and the Music (s).

RADIO 3

6.55 a.m. Weather. 7.00 News. 7.05 Overture concert, part 1 (s). 8.00 News. 8.05 Concert, part 2. 9.00 News. 9.05 This Week's Composer: Handel. 9.50 Tamas Vasary piano recital (s). 11.00 Music Interlude. 11.25 Cricket, Third Test: England v India, including 1.35 p.m. News. 1.40 Your Letters Answered. 2.00 Lunchtime scoreboard. 6.40 At Home. 7.10 Pied Piper (s). 7.30 Proms 79, part 1: Debussy, Birtwistle (s). 8.20 "From an Abandoned Work" by Samuel Beckett (s). 8.40 Proms 79, part 2: Mussorgsky (s). 9.30 The Petal. 10.00 Dietrich Fischer-Dieskau song recital (s). 10.30 Violin Sonatas (s). 11.25 Jazz in Britain (s). 11.55-12.00 News.

VHF with Medium Wave above except 6.00-7.00 and 11.00 a.m.-7.10 p.m. as follows: 6.00-7.00 a.m. Open University. 11.00 Edinburgh International Festival 1979 concert, part 1 (s). 11.30† Festival Comment. 11.45† Concert, part 2. 1.00 p.m. News. 1.05 BBC Welsh Symphony Orchestra (s). 1.55 Music for Organ (s). 2.35 Matinee Musicale (s). 3.35 New Records (s). 5.00 Piano Duo. 5.45-7.10 Open University.

RADIO 4

6.00 am News Briefing. 6.10 Farming Week. 6.25 Shipping forecast. 6.30 Today, including 6.45 Prayer for the Day. 7.00, 8.00 Today's News. 7.30, 8.30 News headlines. 7.45 Thought for the Day. 8.45 Theatre Street. 9.00 News. 9.05 Start the Week with Richard Baker. 10.00 News. 10.05 Wildlife. 10.30 Daily Service. 10.45 Morning Story. 11.00 The Cost of Vandalism. 11.45 Listen With Mother. 12.00 News. 12.02 pm You And Yours. 12.27 Brain of Britain (S). 12.55 Weather; programme news. 1.00 The World At One. 1.40 The Archers. 1.55 Shipping forecast. 2.00 News. 2.02 Women's Hour. 3.00 News. 3.05 Afternoon Theatre (S). 4.35 Story Time. 5.00 PM News magazine. 5.50 Shipping forecast. 5.55 Weather; programme news. 6.00 News. 6.30 I'm Sorry I Haven't A Clue (S). 7.00 News. 7.05 The Archers. 7.20 From Our Own Correspondent. 7.45 The Monday Play (S). 9.15 Many Happy Returns with Martha Gellhorn. 9.30 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.30 The Charlton Interview. 11.00 A Book At Bedtime. 11.15 The Financial World Tonight. 11.30 The Unforgettables. 12.00 News.

BBC Radio London

5.00 am As Radio 2. 6.30 Rush Hour. 9.03 London Live. 12.03 pm Call In. 2.03 206 Showcase. 4.03 Home Run. 7.03 Black Londoners. 8.00 Breakthrough. 10.00-5.00 am: As Radio 2.

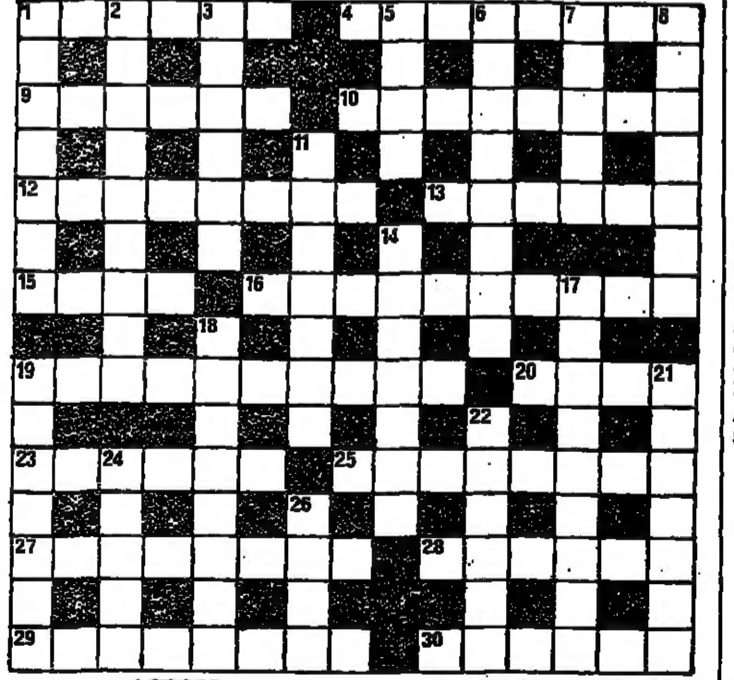
London Broadcasting

5.00 am Morning Music. 6.00 The AM Show with John Perkins and Steve Wood. 10.00 Open Line. 1.00-8.00 pm LBC Reports with George Gale at 3.00. 8.00 After Eight. 9.00 Nightline. 12.00 LBC Reports. 1.00 am Night Extra. 4.00 Monty at Large.

Capital Radio

6.00 am Graham Dene's Breakfast Show (S). 9.00 Dave Cash (S). 12.00 Mike Allen (S). 3.00 Roger Scott (S). 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Alan Freeman (S). 11.00 Tony Myatt's Late Show (S). 2.00 am Night Flight.

F.T. CROSSWORD PUZZLE No. 4,052



ACROSS

1 It's the bird to talk lightly about us (6)
4 The fellow gets an order for bacon (4, 4)
9 A foreign type—not upright (6)
10 A saint to beat in Wales (8)
12 A small-time criminal in infancy (8)
13 Search about, but they are not all marble (6)
15 Port trasaction (4)
16 Submit a sound reason for the doctor's visit (4, 2, 4)
19 Diarist's suggestion for retirement (3, 2, 2, 3)
20 Chooses a different post (4)
23 There is little money for a good man with a place in Bucks (6)
25 Don Quixote's lady-love may include a variation (8)
27 It is unavailing to turn a shooter on a politican (8)
28 Here is a theologian to hazard a guess (6)
29 Proves unreliable like a dress with a hem (4, 4)
30 Cuts off the prophets about five (6)

DOWN

1 "But now I am cabined, —, confined" (Macbeth) (7)
2 The right celebrity comes before the council (9)
3 A broken girth and no mistake (6)
5 An animal brings Eugene to book (4)
6 "— to a satyr" (Hamlet) (8)
7 Struck a distinguished companion and caused a hold-up (5)
8 South American country has Sarah under examination (7)
11 Wartime cocktail (7)
14 Money coming in to engineer a meeting-place (7)
17 Once thoughtful and costly (9)
18 Troubled spots for Edward (8)
19 Team magazine (7)
21 Authoress takes in a sort of square for those who have endurance (7)
22 The voice of the doers (6)
24 Unwrought gold must be entered (5)
26 Upward attraction (4)

The solution of last Saturday's prize puzzle will be published with names of winners next Saturday.

THE ARTS

Architecture

The State of the Art by COLIN AMERY

There is something very touching about the remark made in the current issue of the Royal Institute of British Architects Journal, "Current British Architecture is enjoying enourmous popularity overseas." What do they mean? Are British architects secretly building masterpieces on far flung foreign shores? Or, are hordes of foreigners rushing to take package tours around the centre of Birmingham?

Alas, neither explanation is the right one. The fact is that a few foreign critics and architects have decided that they are tired of the waywardness of much that is new in Japan and America and on taking a look at new architecture in Britain see encouraging signs that some of the traditional architectural virtues are alive and well.

It was the annual announcement of the RIBA Architecture Awards that prompted the Institute to wheel in the foreigners to defend the profession in *Britain*. I wonder how many natives would agree with their verdict?

The RIBA Awards provide a good opportunity to survey the British architectural scene and this year they are particularly revealing. Four recently completed buildings received full scale awards and sixteen were commended. A look at the four winners is perhaps enough to test the quality of current buildings and to attempt an assessment of the state of the art.

Of the four winners only two are full blooded new buildings, the other two are a magnificent cathedral that was conceived in very different times and a revamping operation on a Victorian theatre.

The two new buildings are both offices and both in the country: Gateway House in Basingstoke, designed for the Wiggins Teape paper group by Arup Associates, and Winslade Manor, new offices adjoining an old house for the London and Manchester Assurance Company near Exeter designed by Powell, Moya and Partners.

Liverpool Cathedral

The award jury praise Gateway House for its "bold gestures at a more humane approach to a large headquarters office building." The building is a low terraced arrangement with a striking series of rooftop gardens that are so disposed to provide verdant views from every office window. Gone is any sensation of a cliff of offices, instead there is the pleasing effect of half a ziggurat sprouting with greenery.

Inside the offices are a mixture of large open plan spaces and a series of more private rooms. The interior reveals the quality of the structure which is a series of pyramid shaped roofs supported at each corner by concrete columns. Nothing remarkable about this but a regular and pleasing series of shapes that reduces the blank emptiness that overwhelms so many large offices. This is a building of consistent quality, not one to make your heart leap with excitement but of a standard that should be basic for all new buildings.

Much the same sort of feelings are aroused by the other award winning office building. Winslade Manor is an example of architectural good manners. It is really a giant service wing to an existing 18th century country house. As an exercise in scale it succeeds because the integration of a large new building with the house and stables adds effectively to the fine setting.

The two and three storey additions are uncomprisingly modern, built of reinforced concrete with a colonnade of columns around the perimeter. They fit well into the older setting because they have some of the virtues of the 18th century house, like simplicity of detailing and a restrained use of materials.

So far so good. It is possible to see how committees of architects found serious virtues in both of these buildings. There is also no doubt that the people who work in them find them agreeable and that they provide minimum environmental standards that should be provided by all large corporate employers. But are they really distinguished pieces of architecture? I suspect that most people would say that they liked them well enough but they would not be likely to travel far to see them.

This is not the case with the third award winner, Liverpool's Anglican cathedral. This is undoubtedly a great building, a rarity, a place set apart. It was brave and right of the RIBA to belatedly acknowledge Sir Giles Gilbert Scott's masterpiece. It has been building for 75 years and now stands as a vindication of Scott's belief that you can interpret historic styles in a free and original way.

To visit the Roman Catholic cathedral by Sir Frederick Gibberd in the same city is to see the true poverty of the modern style when it strives for meanings that are outside its range. The award given to Liverpool reflects the new climate in architectural thought. It is no longer a sin to look at history and no longer criminal to design buildings that not only refer to the past but actually rely on tradition.

The building that took a fourth award is the Theatre Royal in Nottingham. It is a standard Victorian theatre that has been refurbished and added to by the architects, Renton Howard Wood Levin Partnership. The remarks of the jury are very informative about their feelings for architecture at the moment. They say the architects have created a delightful unity, "where the question of which is old and which is new hardly arises." Not so long ago the cries of "pastiche" would have been ringing around the RIBA because the architects spent a lot of time and money at Nottingham recreating the Victorian detail of much of the interior. There is no doubt that they learned from the old building, and were not ashamed to imitate its virtues.

What the awards show is that the profession is beginning to appreciate there is a wind of change blowing through modern architecture and that the bellows are being pumped, not really by the architects, but by the public who are gradually blowing architecture back on to a more familiar course. I think most people would agree that a true understanding of the nature of architecture leads inevitably towards a respect for tradition. Now the profession which awards these prizes to itself every year is also showing encouraging signs of a change of heart. Architecture must respond to and reflect society and architects do now realise that our everyday needs are not as simple as they once thought.

Coliseum

Die Fledermaus by MAX LOPPERT

The English National Opera's new *Fledermaus* is not wholly new. The sets are, and the costumes; but the production, by Glen Byam Shaw and Tom Hawkes, bears a very close resemblance to Byam Shaw's previous staging for the company, which began life at Rosebery Avenue, and then survived (not without a certain mouldiness at the edges) into the St. Martin's Lane repertory. Thursday's performance was, in the main, a pleasant, friendly evening. It presented Strauss's operetta a good deal more faithfully than does Covent Garden in its splashy multilingual knees-up. What it does not entirely manage is make of the operetta the kind of riotous entertainment we still (perhaps subconsciously) expect of it. Is this asking too much of the company, in English, in a theatre the size of the Coliseum?

The work has dated. Champagne is no longer a symbol of ultimate hedonistic abandon; drunkeness is no longer a cause of universal mirth; and the second-act festivities, at least as generally presented today, no longer look much fun. The contrast with Offenbach's best operettas is instructive, for with similar dramatic impediments, they can still sway the senses through the dangerous wit, verve, and gaiety of their music. The music of *Die Fledermaus* is not like that. It is beautiful, luxurious and fertile in invention, full of good humour expertly imprinted on the notes; but it is essentially soothing, comforting, unchallenging.

Perhaps if the seedier, seamier aspects of the characters were allowed sharper focus, this might add a squeeze of lemon juice to the rich, creamy mixture. At the Coliseum they are all played as nice people, good-looking and young-looking, having a jolly and essentially decorous time. Orlofsky's ball is, in fact, not all that jolly — the chorus stand around a good deal, providing a stage audience to the activities of the principals rather than participating as fully paid-up guests. The production is not coarse, and for that we should be grateful; at its best—in the opening scenes and in the prison scene, often a good deal longer-winded than it seemed on Thursday—a comfortable frame is est up around some very comic acting. It is an exceptionally pretty frame. Tim Goodchild's designs, Biedermeier in pearly grey and pink, later in black and white, all with lace trimmings, also hold the promise of longevity, which is high up on the list of an ENO operetta's requirements.

New to the company are Anne Pashley's Orlofsky and Clive Dunn's Frosch, both gratifyingly successful traversals of mine-laden fields. Miss Pashley's princeling, got up as a mustachioed cross between Marcel Proust and Charlie Chaplin, does not ape male manners; it re-invents them, with dash and great address. Mr. Dunn plays his long scene as a music-hall episode, minutely detailed and choreographed. That we accept it as such, and not as a tedious delay of the denouement, is a measure of his achievement. He played with Eric Shilling's prison governor, a disarming collection of all Mr. Shilling's best-loved stage devices, as though the partnership were of long standing.

Rosalinda is Lois McDonall, gorgeous to look at, good with the spoken (if not always with the sung) words, grandly carried and at the same time self-mocking in the way that belongs to operetta leading ladies. She was not in best voice; the Csardas was hard and strained; Marilyn Hill Smith's pert Adele (a little too frequently given to doll-like mannerisms). David Hillman's personable Eisenstein, and Geoffrey Pogson's fresh and funny Alfred all deserve more attention than they can be given here. The conducting of Ian Reid, though it reminded us of the Schubertian grace in the scoring, tended to lethargy, and showed a less than complete comprehension of that most difficult of arts, the Viennese rubato. As always, there is a handsomely full edition of the score at the Coliseum, complete with ballet music (shakily danced though it may be).

Leonard Burt

Lois McDonall and David Hillman

Theatre Upstairs

Carnival War a Go Hot by MICHAEL COVENEY

The Royal Court's main stage is *dark* at the moment, but the English Stage Company's best new plays of the year continue to emerge at the top of the stairs. After Wallace Shawn's waspish threnody of New York dissipation, Michael Hastings chips in with the best English costume farce since Joe Orton's *What The Butler Saw*.

The recommendation, put like that, needs elucidation. Roger Glossop's design consists of the interior of a green military bus on the fringe of a recent Notting Hill carnival (Merlyn Rees was Home Secretary, Chelsea at home to Norwich). Into it are crowded three policewomen. Literally *stripped for action*, they are joined by three young soldiers, another element in the combined operation of law and order. A black policeman, in the job merely for money (what else?), boasts of his role of sop to the media. The whole company is overlorded by a civilian instructor in "counter operations." A long-haired hippie reveals himself to be a Detective Sergeant from Tulse Hill when he springs to action in the play's first violent outburst: one of the lads has taunted the copper about being a black member of the law-enforcing establishment.

The play is cunningly developed as both an exercise in internal relationships and a study of this ragbag corporation's attitude to the outside world, dimly represented by the distant throb of a steel band. Expectations are continuously undermined, the audience never allowed to draw final conclusions about what the uniform or lack of it, implies.

In this respect, Mr. Hastings has written a comedy more complex than his successful *Gloo Joo* and, in its stunningly evocative and physical climax, much more daring. The chief girl, having bemoaned her lot of being taken for a sexual reject or even a lesbian, reveals herself to be just that. The virginal young soldier about to be drafted to Ulster finds sexual gratification on the back seat of the bus. The others dance. All join in the chorus of Rod Stewart's "Sailing."

At this point the resemblances to Orton's great farce become clear. The Dr. Rance figure is the instructor, a character competently played by the excellent Bernard Gallacher but, in Antonia Bird's somewhat mistimed production, not as fully into the writing's groove as he could be. As a result, the laughs come a little too slowly.

The bus is stationed near the Portobello Road, and the action splits into preparation for the conflict and the frantic aftermath. The best performances are those of Sue Lynne as the cool, fleshy-thighed lesbian, and Stephen Petcher as an aggressive soldier. Mr. Petcher and his colleagues, kitted out in absurd riot gear, look like peace-keeping astronauts, an image mercilessly exploited in a very funny rehearsal sequence.

Mr. Hastings' achievement is not merely technical; his play has much to say about how a community faces its responsibility to enjoy itself, and the problems, we gather, may start with those dictating the conditions and, inevitably, the limits.

Susan Hampshire to star in 'Night and Day'

Susan Hampshire takes over the leading role from Maggie Smith in Tom Stoppard's award-winning play *Night and Day* at the Phoenix Theatre on September 10. Maggie Smith leaves the cast to head the American production which opens on Broaway in November.

Schreier recital cancelled

Peter Schreier is indisposed with a throat infection. His recital tomorrow night in the Queen Elizabethe Hall is cancelled and wil be replaced by a chamber music concert with Pinchas Zukerman, Eugenia, Zukerman, Yefim Bronfman, Yo Yo Ma, Marc Neikrug and Nancy Allen in works by W. A. Mozart, Xavier Mozart, Fauré, Ravel and Ibert.

Exhibition of sporting pictures

The thirty sporting pictures recently presented by Mr. Paul Mellon to the Tate Gallery, which it was to have been shown next winter are now on view at the Tate Gallery until Sunday, September 30.

This gift, made through the British Sporting Art Trust, includes two paintings by Stubbs.

Wembley Stadium

The Who

There was something strangely formless about The Who's concert at Wembley on Saturday. In prospect it should have been quite an occasion—the first major appearance for years of one of the great rock bands at a time when their original image as mods was enjoying a sudden reviva lamong a younger generation. Just as the incoherent rockers were pushed over by the smarter mods in the mid-sixties so the punks of 1978 are giving way beneath a wave of neat suitings and heavy over-coats. To top up the good timing The Who has just released *Quadrophenia*, a film which harks back to the Brighton Bank Holiday rumbles and which has enjoyed a great critical success.

But instead of a happy union of the old and new, of a concert which showed established masters exciting fresh youth, the heavy hand of commerce was over the show. The emerging bands know that they must play in small halls to maintain contact with their audence: there can be no contact in Wembley Stadium a venue only used when the pay outs for everyone concerned have to be at the tax exile level.

This was a return to the mammoth festivals where everyone goes through the paces, and being there is more important than enjoying yourself: it is at odds with "new wave" immediacy and not surprisingly the audience was old Who fans rather than new Mods. They certainly enjoyed seeing Pete Townshend and Roger Daltrey perform again, like over-wound puppets, the same convulsions that created the Who legend more than a decade ago; they were re-assured at the presence of John Entwistle, the frozen bass man whose immobility almost steals the show from the surrounding frenzies; and they probably missed the uncontrolled spasms of the late Keith Moon, even though the replacement drummer Kenny Jones (from the Small Faces) laid down a very solid rhythm.

For men in their mid-thirties the Who remain trim, and the well-worn gestures survive—Daltrey whirling the microphone lead, Townshend, cart-wheeling his arms and vaulting around the stage. But it looked a bit slowed down, a remembered routine. The songs stay the same, too, although there was a lot more than formerly, perhaps too much, of "Quadrophenia," suggesting that a bit of plugging was underway.

There were, of course, the dramatic effects, mainly concentraded around the short excerpt from "Tommy." Spotlights raced around the vast stadium; green strobes made patterns on the faces; rockets exploded and smoke puffed. For a time the music and the spectacle lifted the spirits. After this injection of drama the white flash at the end of the concert and the lighting of matches, by the 70,000 or so to coax an encore were something of an anti-climax. Once again there was a sense of duty, not of delight. It was subdued and rather dated. We had all been here before, just two hours before, in fact, when the Stranglers had ended their more biting set with even bigger bangs, brighter flashes and a torrent of smoke.

ANTONY THORNCROFT

Old Vic

Romeo and Juliet by B. A. YOUNG

The barrier that divides the Montagues from the Capulets is visibly the dominant motive of this production by Toby Robertson and Christopher Selbie. It stands upstage as we take our seats to the accompaniment of Donald Fraser's twittering electronic sounds—an impregnable iron railing, patrolled by distant sentries. It serves later, moved downstage, to mark the edge of the public place where all the trouble happens, or as the first storey of the Montagues' house, or the wall of the Capulets' tomb. It never physically divides the families, except when Romeo climbs over it with his rope-ladder, but the feeling of restraint is always present in Robin Archer's design.

Violence inhabits the playing to a similar degree. Old Montague and old Capulet themselves take part in the first of the disturbances. Capulet so far forgets himself as to slap Tybalt's face (and gets away with it), and there is much pushing and shoving even among friends. The sense of strain caused by the great family vendetta lies over all.

As the fashion is, the young people are dressed to suggest Renaissance Mods and Rockers, in Renaissance jeans and leather motor-cycling jackets. Michael Thomas as Romeo might be about 17 or 18 years old, and his childish behaviour sits aptly upon him. His companions are somewhat his senior. They include Ian Richardson as Mercutio; as you might expect, he gives a ravishing account of the Queen Mab speech, but I couldn't believe that he was much hurt by Tybalt's fatal rapier. He seemed more concerned with coining a phrase than with staunching a wound. The fights, arranged by Ian McKay, are furious but gentlemanly.

Juliet looks delightfully pretty and childlike as Janet Maw plays her; she wrings the heart in the scene (played here on the balcony, not in the orchard) beginning "Gallop apace, you fiery-footed steeds," though I think she might weep more openly, howl even, when she has heard the bad news. "Pomegranate," by the way, has only three syllables, and won't scan with four.

Friar Lawrence, played by Ronnie Stevens, gives everyone a lesson in clear and intelligent verse-speaking, a very good performance indeed. Barbara Jefford's Nurse is good too, not such a hag as Nurses often are, and not so relentlessly affectionate. The senior Capulets are a notably human couple. Sheila Mitchell as Lady Capulet looks a little old for 26 ("I was your mother much upon these years that you are now a maid"): perhaps it's the effect of living with Hugh Sullivan's tetchy old Capulet, another very well-spoken performance.

Viking arm-ring bought by the British Museum

A Viking gold arm-ring found by a young woman on her honeymoon last year has been bought by the British Museum. The arm-ring, which dates to the 9th to 11th centuries AD, is of Scandinavian Viking origin.

It was found last October by Mrs. Kay Creasey on the beach at Goodrington near Torquay, Devon, while collecting shells. At the subsequent inquest it was declared *not* to be Treasure Trove and was therefore returned to Mrs. Creasey.

The arm-ring was sold for £6,500 at Sotheby's in July when it was purchased on behalf of the Museum. It is now on display in the Museum's Early Medieval Room, and will later be seen alongside other gold arm-rings from Ireland, North Germany and Denmark in the exhibition *The Vikings*, which opens at the British Museum in mid-February 1980.

CRICKET BY TREVOR BAILEY

How to avert spectator disaster

WITH ONLY a limited amount of play on the opening day and none on the Friday or the Saturday, it seems almost certain that for the second successive year the Headingley Test can be written off as a cricket, financial and spectator disaster. Once again, there was plenty of time to wonder how the game came to be invented in this country, and whether something can be done to assist the long-suffering spectator when the weather turns really mean.

Spectators would unquestionably receive more value for their money if the umpires and players were prepared to interpret "playable" more literally, and accept conditions that were less than perfect. On Saturday the pitch was dry, the square firm, and the weather fine, but the match was abandoned for the day because a comparatively small section of the outfield was bog-like.

Cricket could have taken place, but one must sympathise with the umpires, in the unenviable position of sole judges of what constitutes reasonable playing conditions.

Their job depends, it must be remembered, on the marks they receive from the captains, and they are only too well aware that professional players are inclined to be fussy about conditions unless these happen to suit them.

For example, at the Oval in the Prudential International against Australia both teams continued, in a big thunderstorm to finish the match and avoid turning up next day. No talk about the danger of slipping and pulling a muscle.

One suspects less play would be lost if at Test grounds there were an independent administrator with power to act, and whose first duty is to the public rather than to the players.

Another way to provide more cricket to recompense the spectator who has paid, but seen nothing, and to lessen the chances of a draw, which in the present contest has become almost certain, would be to employ the rest day whenever more than six hours were lost in the first three days.

This move would be approved by a marketing man until it dawned on him that Sunday with by far the largest audience potential of the week, is the rest day.

Logic and money suggest that a Test in this country should start on Saturday with the rest day on Tuesday, but this would not appeal to John Player, who sponsor the Sunday league largely because of television coverage.

Directly or indirectly, intentionally or unintentionally, sponsors must influence the decision-makers in every professional sport.

Though there has been a shortage of cricket at Leeds there has been no shortage of talking points, and plenty of time to discuss them. Alec Bedser and Ken Barrington have been appointed manager and assistant manager for the forthcoming visit to Australia.

England are due to play three Tests against Australia this winter, participate in a limited-overs knockout competition, and have one Test in India on their way home.

India are due to play no fewer than 13 tests at home, which could well prove too many for even the most enthusiastic followers of the game in the world.

The welcome increased prosperity of the counties as a result of increased sponsorship seems to have been accompanied by a noticeable decline in standards by the clubs.

The sacking of Smedly in mid-season was hardly an advertisement for loyalty and diplomacy. On Saturday, Tony Lewis, who possesses a deeper knowledge than most, learned second-hand, following a newspaper revelation, that he and Jim Pleass, who had been a first-class player, had been sacked from the cricket committee by the full committee.

The way the matter was handled, by a body whose combined cricket expertise at a serious level one must have some doubts about, has endorsed my belief that too many counties are run by well-intentioned men who do not know what first-class cricket is all about and, even worse, imagine they do.

There also appears to be an increasing number of people on cricket county committees seeking that reflected glory which supplies the motive force for too many football directors.

TENNIS BY JOHN BARRETT

Some vintage play from the veterans

THANKS TO indoor courts in Manchester and London, two national competitions at opposite ends of the tennis spectrum were completed last week on schedule.

At the northern LTC in West Didsbury, the under-21 championships, normally played on grass, were saved by the Tennisquick indoor court there and three others at nearby Stalybridge.

The favourites, both former winners, adapted to the change of surface without difficulty. Michael Appleton, the Cambridge blue, of Lancashire, the holder, defeated Scotland's Donald Watt, 4—6, 6—1, 6—1, to underline his claim that university studies need not necessarily disrupt a tennis career.

Cathy Drury, of Lincolnshire, regained the title she first won in 1977 by defeating surprise finally Eleanor Lightbody of Wales, 6—1 6—3. The workmanlike Miss Drury has proved before that she can win relatively minor tournaments in Britain but she must venture further afield in search of tougher opposition.

In the 18 years of these championships, only three players have won twice John de Mendoza, was successful in 1969, and 1970, before dropping out of tennis a year or so later; Buster Mottram followed him with consecutive wins in 1971 and 1972—the same years that Glynis Coles won her titles.

Both Mottram and Miss Coles ultimately rose to the heights of the British game—Mottram is still ranked No. 1 and Miss Coles is a former No. 2—but I shall be surprised and delighted if either Appleton or Miss Drury emulate them.

In London last week at Queens Club, the All England Club at Wimbledon, and when it rained at the Vanderbilt Club, Shepherd's Bush, the 5th Veterans LTA Championships of Great Britain were being hotly disputed in three groups by about 160 of the keenest and fittest players aged between 45 and 70.

For the second year, the championships were supported by Polytrade, which supplies a modest cash sum to assit with administration and also provide some sportswear as prizes to go with the trophies.

When the championships were first held in 1975, the Worcestershire left-hander, Freddie Field, became the first over-45 champion. On Saturday at Wimbledon he won again, and against the same opponent, but not before the former Queens Club chairman, Clive Bernstein had given him a fright by saving a match point at 5-2 in the second set and leading 4-3 in the decider before yielding 6—4, 5—7, 7—5.

The over-55 singles was another long affair resulting in a 7—5, 6—7, 6—2 win after 115 minutes for Czech-born Merik Kizlink over the eight-times Staffordshire champion Ken Jones.

Two more familiar figures of the veteran scene, R.A.F. "Bundi" Reynolds and Ted Robbins, disputed the final of the over-65 singles. Reynolds won as he usually does on these occasions, but the score 6—4, 4—6, 6—4 suggests that the Robbins's practice sessions at Devonshire Park, Eastbourne, which I witnessed daily during the last Davis Cup tie versus Spain, are bearing fruit.

The ladies are somewhat coy about revealing their ages, so that there is only one age group over 40! That Rita Lauder should have won the singles was no surprise. For as Lancashire's Miss Bentley, she was ranked nationally in the 1960s and aspired even to Wightman Cup status on one occasion in 1966.

This year, the VLTA has enterprisingly launched a competition, for the over 65s. Called the Britannia Cup, and played immediately following Wimbledon, it attracted 12 nations this year, and the British team of Reynolds, Robbins and Kenneth Lo finished as runners-up to the U.S.

Fortunately, the game in Britain is well supported at both ends of the age scale. The future veterans who will perhaps be enjoying the VLTA competitions in 30 years' time are well organised through the LTA with competitions and scholarships supported by the Saab motor company.

The £200,000 that Saab has injected into the under-16 age group over the next five years has enabled Paul Hutchins to achieve his goal of having regular indoor weekend tournaments throughout the winter

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Perks and the tax base

PAYMENT in kind rather than cash is a primitive and undesirable distortion of the market system, whether it arises in barter trading between nations or in the remuneration of employees. So the steps suggested on Friday by the Inland Revenue to tax the benefit provided to employees who use company cars in a more realistic way are entirely welcome. Now that income tax has been cut to tolerable levels, particularly at the top of the scale, it should be possible for employers to offer incentives for hard work and ambition directly through higher pay. The proliferation of perks in recent years in Britain has been a symptom of an unhealthy addiction to high taxes and restrictive incomes policies.

Higher revenue

The Inland Revenue concentrates on the desirability of achieving equity between employees with and without the benefit of company cars. But an even more important consequence of the proposals will be to raise about £330m in extra taxes.

The new taxes will come, in approximately equal proportions, from roughly trebling the imputed benefits of company cars, and from bringing around 1m cars which now escape tax altogether into the tax net. One of the most welcome features of the consultative document is that it suggests eventually abolishing the discrimination against "higher-paid employees" (those earning over £8,500), a category that has little more than political expediency to justify it. Under the present legislation only higher-paid employees are taxed on their fringe benefits. But the Inland Revenue estimates that two-thirds of all company cars are used by employees earning less than £8,500.

Special interests

Naturally there will be squeals of protest against these proposals, as there were in 1976, when the Inland Revenue proposed an almost identical reform. But this time there are grounds for hoping that change will not be sabotaged, as it was in 1976, by what the Inland Revenue calls, with wry self-restraint, "representations from the motor industry." The present government is less inclined to subordinate its overall economic and social objectives to the interests of particular industries. It is also perhaps more conscious of the link between broadening the tax base and cutting marginal tax rates.

Those who might be inclined to complain that a trebling of the tax they pay on their company cars would eliminate most of the benefits they received in the last budget, are overlooking the main justification of the Government's fiscal policies. This is aimed at incentives.

It is a moot point whether the tax system which the present government inherited took too much of the nation's income. What cannot be disputed is that extortionate marginal taxes on income discouraged people from trying to earn more. A profusion of tax allowances and an inadequate level of indirect taxes then saw to it that the Government's total revenue was not very much out of line with that in many other countries. The reduction in marginal tax rates and the broadening of the tax base, can be seen as two sides of the same coin. By gradually dismantling tax concessions, as income taxes come down to acceptable levels, the Government will be able to maintain its revenue and increase incentives at the same time.

Grossing-up

Far from complaining, company car users should be thankful that the Inland Revenue has not proposed an even harsher treatment of perks. First, only half the benefit of a company car would be taxed, when there is "substantial" business use, which covers the great majority of cases. Even when business use is "insubstantial," tax would be payable on only three-quarters of the full benefit.

Second, and more fundamentally, the Inland Revenue has shown no inclination to tax benefits in the most strictly equitable way. This would involve adding to taxable income the gross amount that would yield the value of the perk after tax. Thus a 50 per cent marginal tax-payer who receives a benefit of £1,000 should, in strict equity, have £2,000 added to his taxable pay. Until the value of perks is grossed up, there will still theoretically be a strong fiscal incentive to provide benefits in kind. But even the most determined tax avoiders would recognise, well before the fiscal advantages of perks are eliminated, the greater advantages of operating within the cash nexus.

Brazil at a crossroads

THE CABINET changes announced in Brasilia this month have underlined the strains which the Brazilian economy has been undergoing in the past few years. On top of an already large burden of foreign debt built up as the result of aggressive foreign borrowing undertaken since the late 1960s, the balance of payments has more recently had to sustain new and unexpected commitments resulting from the rise of the world oil price.

Protectionist

The bill for imported fuel this year may well touch \$7bn and absorb more than half the receipts from exports. Hopes that inland and offshore exploration would quickly allow the country to increase the proportion of oil produced from domestic wells from the present meagre 20 per cent of consumption to something nearer self sufficiency have proved illusory. At the same time Brazil's exports, which must be increased in order to pay for the mounting import bills, are facing difficulties. Manufactured items such as shoes are being subjected to protectionist barriers in many industrialised countries. While the world's economy remains in its present sluggish state the demand for Brazilian products of all sorts, from coffee to iron ore, must be slow.

On top of all this the economy has to generate well over a million new jobs a year if the already serious unemployment problem is not to get worse and complicate domestic politics even further. Meanwhile inflation is creeping up and is now running at an annual rate of around 50 per cent.

Labour interests

Brazil's economic difficulties have been compounded by the domestic political situation. The work force is becoming increasingly restive particularly in the great industrial centre of Sao Paulo. Many workers feel that they have not been allowed to enjoy the fruits of the so-called "economic miracle" and on the statistical evidence available their complaints are not without justification. This, combined with a marked impatience with the sort of authoritarian rule that the country has experienced since the military coup d'etat of 1964, has produced a succession of strikes which have paralysed hundreds of factories from Sao Paulo to Belo Horizonte.

In this difficult situation the recently installed government of General Joao Baptista Figueiredo has been pulled two ways. There have been voices in his cabinet which have urged him to cut growth to a minimum in order not to place any further strain on the balance of payments and not to stoke the fires of inflation any further. The chief proponent of his policy has been Sr. Mario Henrique Simonsen, his planning minister.

Others have argued that such a course would only exacerbate the political problems in the country and could be inforced by a return to that form of political repression that General Figueiredo pledged himself to abolish. There are those who thought that it could not be enforced at all given the growing and manifest power of the trade unions, the nationwide desire for political liberalisation and the new found freedom of the Press to criticise government policy.

The departure of Sr. Simonsen from the Government and his replacement by Professor Antonio Delfim Neto, the Agricultural Minister, indicate that Gen. Figueiredo has opted for the bold course of continued expansion and has not been moved by arguments for caution and retrenchment.

Expansion

At first sight Mr. Delfim Neto appears miscast in the role of an expansionist battling on the side of liberalisation. The role he performed under previous presidents as one of the principal architects of the "economic miracle" did not endear him to workers' leaders. In his first pronouncements last week, however, he went out of his way to appear reasonable to organised labour.

For outside observers of the Brazilian scene and notably for those institutions who have lent money to Brazil the decision of Gen. Figueiredo to opt for expansion is one which deserves careful study and analysis. Though heavily in debt already Brazil has signalled that it does not intend to stop growing—or borrowing.

David Fishlock reports on the new technology of swapping power between Britain and France

Cutting an electricity link across the Channel

THE STORMS that turned the Fastnet yacht race into a calamity last week also interrupted trials of another marine venture—this one in the English Channel. Off Sandown, Isle of Wight, the Central Electricity Generating Board is taking its first steps into seabed engineering.

In trials costing £25,000 a day, its engineers are hoping to demonstrate a novel way of laying cable securely on the seabed, out of reach of ships' anchors and the buffeting of trawls used to stir up bottom-dwelling fish. They hope to bury, by remote control, high-voltage electricity cables at the bottom of a narrow trench 5 ft deep.

If they succeed, four such trenches will be cleaved through the chalk separating Folkestone and Calais. Along them, by the mid-1980s, Britain could be exporting to France what a former CEGB chairman called "coal-by-wire," to the tune of 1m tons a year. The venture is expected to cost about £360m (March, 1979, prices), as the accompanying table shows. But it could pave the way for further big electrical projects during the 1980s, for example between Britain and Ireland and Britain and Belgium. Both nations have been pressing the CEGB for this kind of support for their electricity systems. It could also be the way to safeguard submarine telephone cables on the Continental shelf.

The venture is a joint one with France, under serious discussion between the CEGB and Electricité de France (EdF) since 1971. The basic idea, which is being exploited all over Europe in no fewer than 130 "inter-ties" between the electricity systems of adjoining countries, is mutually to enhance the security of electricity supply. If trouble strikes—a big generator suddenly fails, for example—one country can call upon another for help.

Avoiding 'spillage'

But in practice there is much more to these international inter-ties than merely emergency service. They began in central Europe as a way of exporting surplus hydro-electric power when the dams were full, thereby avoiding what the engineers call "spillage": water running to waste. Gradually, the interconnected electricity companies found that they could swap more and more electricity profitably and to their mutual benefit. They took advantage, for example, of differences in the times of peak demand, buying in daily to meet the peak rather than installing extra "peak-lopping" generating capacity.

Britain joined the European electricity pool in 1961, when the CEGB and EdF laid a cross-Channel cable between Dungeness and Boulogne: half each, joined in the middle. It proved its value to Britain in the rough winter of 1962-63, when we bought French electricity because icing was hampering our own system.

But with the rapid growth in electricity demand on both sides of the Channel, a 160MW cable soon became too small. Worse, it proved unreliable, subject to too much damage in a strait through which several hundred vessels pass daily, because it lies on the seabed. The cable is out of action more than half the time.

In 1974, badly hit by the OPEC oil price increases, the French began to urge Britain to agree to establish a new link. They foresaw a serious risk to supplies following dry years when their hydro-electricity capacity would fall. Britain, on the other hand, some 70 per cent dependent on coal for its electricity, saw an opportunity profitably to export off-peak power.

Subsequent discussions considered the possibility of swapping as much as 4,000 MW. But they settled on 2,000 MW as a capacity which could have a payback period of as little as five years. The plan has the tacit approval of the the two governments and letters of intent have been signed by the two utilities.

But there remains one big uncertainty. Both parties agree that it would destroy the economic case for the cable if they achieved an availability no better than for the existing link. They are looking for a cable that operates for 95 per cent or more of the time. Other people's experience of submarine cables in less-congested channels confirm their view. The Norwegians and Danes, who collaborated on a 500 MW cable across a 90-mile stretch of the Skagerrak, have met enough problems since 1976 to be trying to bury much of the cable now lying up to one-third of a mile deep on the seabed.

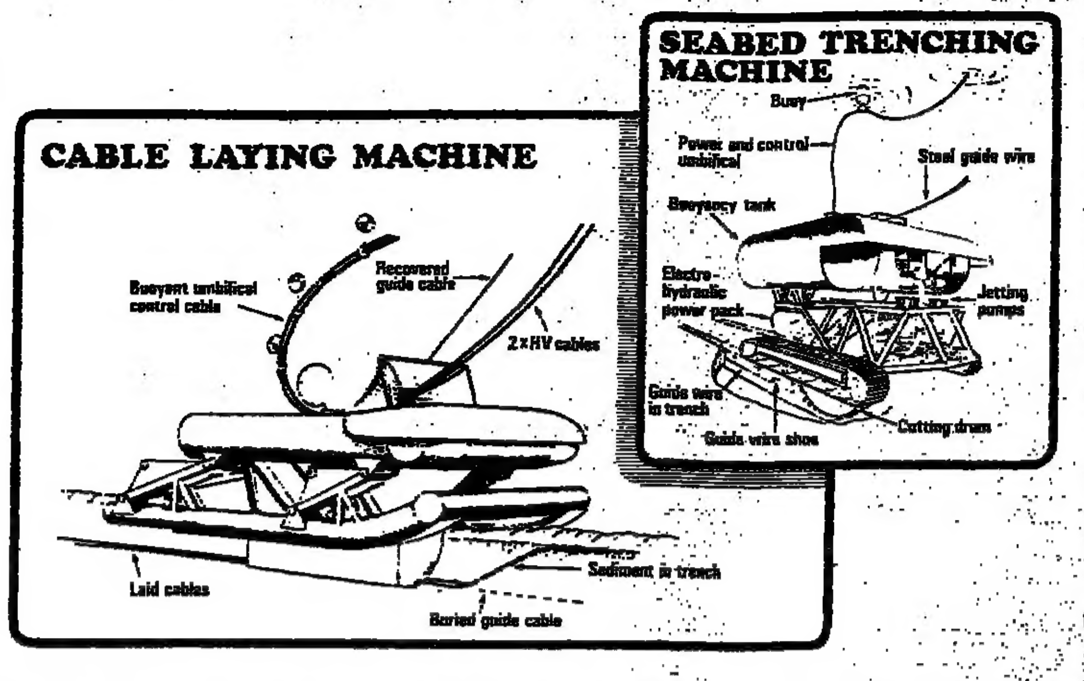
ESTIMATED UK COSTS OF 2,000 MW CROSS-CHANNEL CABLE*
(March 1979 prices)

	£m
Converter station at Sellindge	59
400 kV sub-station at Sellindge	33
DC submarine cable (32 miles)	73
Land and other cables	30
Civil work	10
Relays, controls, etc.	10
Modification to 400 kV transmission	17
TOTAL	182

** Electricité de France will have similar costs, plus the expense of strengthening its transmission system in north-east France.*

"Whether the project goes ahead or not depends on whether we can embed. If not, it's no go—both sides agree on that," says Dr. Peter Howard, director-general of the CEGB's transmission division at Guildford. They surveyed the seabed but found no convenient route through soft seabed, such as can be exploited in the Skaggerak. So they must find a way of cutting through rock.

Both utilities have mounted development programmes. They chose a depth of five feet as adequate to protect against all but a supertanker's anchor. Geological survey has indicated a lot of hard rock, with compressive strengths as high as 25,000 lb per square inch.



'Dredging' the chalk

The French are experimenting with a method of "dredging" the chalk. The CEGB believes that it will not prove man enough for the hard rock which it will encounter in patches even in the mainly chalky seabed along the 32-mile route chosen between Folkestone and Sangatte.

The transmission division of the CEGB, responsible for Britain's half of the project, began by making a world-wide survey of organisations experienced in seabed engineering. It canvassed a couple of dozen companies, from utilities with submarine links to firms laying pipelines. All their experience—even of the North Sea—proved to be in soft terrain. No one, concluded Mr. John Yates, project manager, had yet solved the problem of embedding in rock.

So the CEGB chose two UK companies as its collaborators: Land and Marine Engineering, experienced in the North Sea; and Balfour Beatty, part of BICC, with wide experience of submarine cables. In January it placed contracts with these companies for the design and construction of two novel machines: a 11½-ton trenching tractor, designed by Land and Marine; and an 80-ton cable-laying sled, designed by Balfour Beatty.

The principles of the trenching machine had already been tried on a scale model, cutting hard rock in quarries last year. It uses a rotary shearer of the kind used in coal-cutting to cut a slit about 5 ft deep and 2 ft wide. At the same time it feeds a steel hawser into the freshly cut trench.

The sled follows, hauling itself along the hawser while feeding a pair of high-voltage cables into the trench. It is equipped with high-pressure jets to blow out sediment ahead of the cables. Both machines are operated remotely from a control console aboard an accompanying vessel. But divers remain in attendance on the seabed.

These are the machines now being tried out at a depth of about 45 feet in the chalky seabed of Sandown Bay. Dr. Howard is delighted with the progress of his collaborators in delivering them "precisely to programme" in order to catch the weather window this summer. Provided the trials continue to go well, the plan is to move at the end of August to a point off Sangatte, the first of four test points along the proposed cable route. Over the next few weeks while the weather window remains open the system will be tested in different rocks: chalk, sand, gault clay, hard sandstone—and the last and most difficult test—cobbles at 150 feet beneath the main shipping lane. Each time it will attempt to lay a few hundred feet of cable.

John Yates believes that if it survives these tests—costing about £5m, including the price of the machines—the CEGB has a system that will cut a trench to France in 30 days or less. It will then lay a pair of cables in another 10 or 11 days. His aim is to lay them as unbroken lengths of cable, to avoid the inevitable weakness of a join made at sea. He hopes the French—who are closely observing the trials—can also be persuaded to use the system to cut their own pair of the four trenches which will be required.

The submarine cable itself, says Dr. Howard, presents no particular technical problem, although the CEGB has specified one that will not be oil-filled, lest it should ever be accused of leaking oil into the Channel. It is negotiating with two potential suppliers—both UK-based—BICC and Pirelli General. The submarine cable contract will embrace the cost of setting up a manufacturing facility for continuous stretches of cable of the length required; one which could readily find future markets both in Britain and abroad.

Two-way flow of power

The biggest slice of investment, however, will be in the converter station. This can be seen as one of a pair of stopcocks which, when operated together, can switch the generating capacity of a big power station from flowing in one direction to flowing the opposite way. Its handful of operators, communicating in a curious meld of English and French, will be able to control the flow of electricity to meet a continuously changing pattern of demand on both sides of the Channel.

The two utilities agree that the most responsive way of controlling the flow is to convert the normal 400-kilovolt alternating current supply of each national grid into high-voltage direct current for the length of the inter-tie. In that way aberrations on either side of the Channel are not communicated to the national grid.

Modern technology of ac to dc conversion and *vice versa* involves large silicon semiconductor devices called thyristors, thousands of them, assembled into "valves" and stacked up in large valve halls, and kept cool by freely circulating air. For the past nine months GEC has had a trial running in north-west London of such a converter valve, to the evident satisfaction of the CEGB.

270 ft high building

But the size and above all the headroom required for these valves suggests a big building: perhaps up to 270 ft high. It also suggests the need for large fans to move large volumes of air to keep the valves cool. This in turn has persuaded those living in the vicinity of the proposed converter station at Sellindge, about 12 miles inland of Folkestone, that the CEGB's proposals mean a noisy intrusion into their rural environment. They have asked for and got a public inquiry, to begin in November.

The noise expected to come from the converter station is likely to feature importantly at the inquiry. The CEGB is inclined to play down any idea that it will prove intrusive to a community where the nearest inhabitant lives one-third of a mile away. The cooling fans will be buried in a false basement and the building itself will be sealed to keep out dust.

"It will be less than the rustling of leaves in the trees," claims Dr. Howard. He also points out that his divison has lately been installing jet engines in urban areas to provide standby power from gas turbine stations, and has been able to insulate the surrounding houses from their noise.

For the CEGB the over-riding advantage of the Sellindge site is that it is conveniently close to the 400-kV arm of the grid between Dungeness and Canterbury. How Dr. Howard and his team will disguise the size of the building is still undecided. Those opposed to the project at Sellindge have said it will be as big as Canterbury Cathedral. If it helps them accept it, he would be prepared to put in stained-glass windows, he says.

MEN AND MATTERS

Crying wolf in the woodshed

A seemingly insignificant takeover announced last week has stirred up the hornet's nest of Britain's highly traditional timber trade. Leo Groth, a director of Stora UK Group Holdings, managed to escape a good number of irate phone calls by taking a judiciously-timed holiday in the South of France. But he is now back at his desk and facing the not-very-harmonious music which has greeted the Swedish company's takeover of George Shipway, an old family timber company in Birmingham.

"It's regarded as slightly treasonable to buy one of our customers" Groth admits. "They think if we are successful we are going to swallow one, then another, then another." But he insists that Stora—the second-largest private owners of forest land in Sweden, with 2.25m acres—has no intention of upsetting the applecart, either by going into the retail market, or locking out its other suppliers: "Then we would really have burned our bridges."

Given that Shipway is a relatively small company dealing largely in so-called "sludge" for pallets and packaging, these seem plausible enough denials. What worries Groth is that, despite his protestations of commercial innocence, the main importers in the UK—(four of them, he says, have well over half the country's supplies sewn up)—may terminate arrangements with Stora and put pressure on other suppliers to cut Shipway adrift. If that happens, Stora would be forced to distribute its own timber. "But it would be their fault, not ours." Understandably enough, Groth is anxious to play down this possibility.

Another small Midlands firm I talked to, also turning over around £2m a year, and recently taken over by a Finnish supplier, felt, however, that this kind of development was inevitable in the trade. "It's a necessity," its managing director tells me. "The little importer is being squeezed out by the conglomerates. His margins are under pressure. It's the only way he can secure his market." In the next 10 or 20 years, he thinks, middle-sized companies which have not teamed up with an exporter will have disappeared. Many so-called traditionalist importers have in any event set change in motion by trespassing in the last 15 years closer and closer to the retail level, traditional merchants' territory.

John's joke

Even propaganda wars have their lighter moments, as Eschel Rhoodie has been telling the Dutch magazine Elseviers. In his account of secret diplomatic contacts with black African states between 1974-76, the former head of the South African Information Department describes his "good relationship" with President Mobutu, of Zaire. So good was this relationship, he says, that he was invited to the presidential palace and given the tour of inspection usually accorded honoured guests. This included a visit to the presidential bedroom, the major feature of which, it turned out, was two large statues of Mobutu placed at the foot of the presidential bed. On hearing the story from his minion, then-President John Vorster remarked that "Mobutu is the only man I know capable of giving himself a goodnight kiss."

Gang warfare

Henning Scherf, senator for finance in the Bremen state assembly, and a rising star among West Germany's Social Democrat politicians, set off recently on a cycling holiday. But whenever he stops pedalling there is a reporter waiting to ask him how he defines the word "gang." The tall, 40-year-old Scherf affects surprise. "A gang," he says, "is something honourable up on the coast. It is a team of men who unload ships."

This explanation fails to mollify Franz Josef Strauss, the Prime Minister of Bavaria, or the editorial writers of the Christian Democrat dailies. The outspoken Scherf had given an interview just before he mounted his bike, in which he said: "Imagine, someone like Carl Carstens as Head of State. Then Richard Stuecklen as president of the Bundestag; and finally, Franz Josef Strauss as Chancellor. It's like a bad dream. I would feel as if the country had been handed over to a gang."

Strauss quickly weighed in, calling this an insult to Carstens, the President-elect, to Stuecklen, soon to take up his new post in the Bundestag—and not least to himself. With his ambitions to become Chancellor, Strauss is exploiting this chance to embarrass the Social Democrats.

In the past, Scherf's unconventionality has been fairly harmless — such as refusing a chauffeur-driven official car and biking around Bremen, or calling his fellow-politicians overweight and complacent. But the impression is now growing that he placed himself in real danger of becoming West Germany's answer to Andy Young.

Frogs' friends

The Chinese, like the French and others, are partial to frogs' legs. Chinese chickens like them too, and certain communes mount large-scale frog and toad hunts in the irrigation canals and fields.

But with Coca-Cola has come conservation. The influential newspaper Guangming Daily last week sounded a warning about "the ecological balance." The newspaper was commenting on a letter from a reader near Peking who complained that a great leap backward in the local frog population was encouraging mass infestations of insects, with the result that this year communes had been forced to buy large quantities of expensive insecticide.

The reader reported that some farms were sending teams on journeys of up to 15 kilometres in search of the hapless frogs. Each man could catch 1,000 a day. Some species, including a slow-moving giant toad with a voracious appetite for the destructive army-worm moth, were in danger of extinction: "It is possible to work for half a day in the wheat fields without meeting a frog," he lamented.

Perhaps, like Scottish grouse, the frogs will have to be reared artificially if future hunters are not to return home empty-handed.

Abdul in the works

The wide boys of the Slater era are emerging, partly-reconstructed, from the woodwork. In certain cases happy days are here again, in others not. Into this last category falls a veteran asset-stripper, now settling down to running an engineering company. He was explaining to me last week why his group had to write off nearly £500,000 last year. The explanation lacked, it seemed to me, something in the lucidity department. Eventually his eyes met mine. "Look here," he said, with a hint of early Seventies abrasiveness. "If we're entirely off the record, we got taken to the cleaners by a Saudi called Abdul."

Bidding in spirit

After a long and busy day last week ferrying around Michael Vernon, chairman of Spillers—which has just had a bid sprung on it by Dalgety—Vernon's chauffeur went home and sunk into an easy chair. He was soon aroused by the telephone. It was his father asking what on earth was happening. "I thought Paul Getty was dead," the old man said bemusedly.

Observer

FINANCIAL TIMES SURVEY
Monday August 20 1979

CHINA

China is changing rapidly and becoming increasingly open to the outside world at the same time as it is seeking recognition as a world power. In the first major survey of China to be published by the Financial Times, David Housego, Colina MacDougall and Geoffrey Owen report on their recent visit to China and describe the country's social, economic and political progress.

Welcome partner in the world

By David Housego

CHAIRMAN HUA GUOFENG is to tour Western Europe in the autumn. It says much for China's historic disdain of the outside world that it has taken until the final quarter of the 20th century and almost 200 years after West Europe's pioneering of the industrial revolution and of the socialist ideology on which China's communist regime is based for a Chinese head of state to visit this quarter of the globe.

But like Vice-Premier Deng Xiaoping's visit to the United States in February, Chairman Hua's visit is a remarkable reflection of the change that has come over China in the last two years as it has nudged its way into the international community and sought to become part of the world's financial and trading system.

To gain an entrance ticket it has sacrificed many of its former taboos. It has borrowed abroad, raised syndicated loans on the commercial markets, encouraged investment in joint ventures in China and allowed foreigners to roam across the country in a way that was rarely permitted to the western "compradors" of the 19th century—confined for the most part to their concession areas in the seaports like Shanghai.

At the recent meeting of the National People's Congress it also revealed for the first time in 20 years a wealth of economic data, suggesting that China may indeed soon apply for membership of other global clubs like the IMF or the World Bank.

Overdue

China has also been seeking recognition for itself as a world power—and Chairman Hua's much publicised tour is certainly part of this objective. China wants to cut a higher profile in what it sees as the central issue of international diplomacy today—containing the power of the Soviet Union. To that end it has normalised relations with the U.S., signed a Treaty of Friendship with Japan and reached a long-term—though vaguely worded — commercial agreement with the EEC. It is also anxious to reassert its influence in South East Asia, risking this year a war with Vietnam to bring to heel an historic rival and to challenge the growth of Soviet power in the region.

Along with this more open international stance there has been a relaxation of control within China itself. Vice-Premier Deng seems eager to encourage intellectual debate as one way of stimulating enquiry and thus enabling China to absorb new scientific and technological developments essential to its modernisation. It is true that there was a crackdown in the spring when the posters on "Democracy Wall" in Peking and the demonstrations in Shanghai challenged some of the basic assumptions of the communist regime. But China is probably a less repressive society than it was during Mao's lifetime, and it now has at least the framework of a criminal and civil code.

In its bid to achieve more rapid industrialisation, it is looking to the west for technology. It is also trying to introduce into its own cumbersome bureaucracy, which has not begun to come to grips with the problems of how to rule a billion people, reforms that to us seem long overdue—a devolution of responsibility to provincial governments and to industrial enterprises the use of the market mechanism to achieve a more efficient allocation of resources, bank supervision over credits to industry and, perhaps most important of all, the promise of higher standards of living as a way to get people to work.

All this makes China a more welcome partner in the world. It has other attractions too — the possibility of large offshore oil deposits, rich mineral resources and a substantial market (not as great as some had hoped last year but still important) for capital goods. But how long can the present power structure and the policies associated with it survive?

China's record since independence bodes ill for continuing stability in the future. There is probably no other sizeable nation in the world that has seen such upheavals in the last 30 years. Chairman Mao ran the country as if he was carrying out a succession of military assaults. He was unable to accept that social and economic change comes slowly.

The Great Leap Forward of the 1950s was followed by the Great Depression. That in turn was followed by the Cultural Revolution, which began in 1966 and did not finally spend its force until after Mao's death in 1976. The trauma of those years—in which schools and universities were closed for much of the time so that a whole generation has grown up with scarcely any education at all—is only now beginning to be fully appreciated in the west.

Even since Mao's death, policy has moved by fits and starts. The economic plan that Hua trumpeted in 1977 for transforming China into a major industrial power was abandoned less then a year later. China, its leaders now say, is going through a three year period of "readjustment." Western observers are right to remain sceptical as to whether this is the final turn of the wheel.

Three factors will determine whether the present leadership and its policies can succeed. The most immediate is that the leadership itself hangs together. Hua and Deng have been rivals in the past—Hua accused Deng of holding "wrong tendencies" in 1976 after Hua had helped boot Deng out of power—and will probably continue to be.

But they seem to have struck a modus vivendi in which it is the moderates associated with Deng who have the upper hand.

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Political and social framework

The leadership seems to have struck a modus vivendi in the wake of the Gang of Four struggles and is trying to carry through major reforms. But the educational system is still recovering from the excesses of the Cultural Revolution and living standards are rising slowly. In foreign policy distrust of the Soviet Union is the dominant theme.

Economy

The years of neglect, political disturbance and lack of investment have created many obstacles to the country's attempts to modernise by the end of the century. During the current period of readjustment higher priority is being given to agriculture and light industry, but there is an urgent need to correct weaknesses in basic sectors like power and transport.

Industry

Disruption of factories' internal management and excessive bureaucracy have left the industrial system plagued by inefficiencies at all levels. But changes are under way. Managers are being given greater autonomy and joint ventures with foreign partners are being encouraged to attract new technology. A huge programme to build chemical plants has been undertaken and China is trying to reorganise steelmaking to make the best use of existing facilities.

Energy

A serious power shortage has become an important constraint on economic growth, requiring a big investment in new coal mines and power stations. Offshore exploration is being given the greatest priority, with contracts for seismic exploration agreed with Western companies. Peking is working on a law under which companies can explore and develop new fields.

Trade

China will have a trade deficit this year, as it did in 1978, but in contrast to last year plans for import growth are more cautious. Trade with Japan has grown fast as a result on the long-term agreement signed last year, but there should also be considerable opportunities for European and U.S. contractors.

Still divided on power and policy

THE NEW LEADERSHIP

DESPITE THE harmony in China portrayed to the outside world and the announcement at the recent National People's Congress of bold new plans inspired by Vice-Premier Deng Xiaoping—only No. 3 in the hierarchy but clearly still the force behind the throne—the leadership and the country are still divided on questions of power and policy.

Though the balance of power is certainly with the pragmatic Deng and his supporters, whose incentive policies appeal widely to the average Chinese, there is growing evidence that a substantial body of opinion still clings to the radical ideas and attitudes prevalent in the time of Chairman Mao. These are represented on the politbureau by the "*Whateverists,*" *as the Chinese* Press now calls them, those who say "Whatever Mao said was right."

This division has come about partly for personal reasons, because personal loyalties are important in the Chinese system, and partly for political reasons, since those who came to power as a result of the Cultural Revolution and its attendant arbitrary arrests and killings are afraid to lose it (the semi-official figure for deaths during that period is now 400,000). It even springs from ideology, since the years of Mao impregnated almost every official in almost every institution with the idea that success and profit, which the present leadership is desperate to pursue in order to galvanise the economy, were somehow wrong.

Despite this, the prevailing voice of Peking constantly proclaims unity and stability, remarking that the vast majority of people who oppose its current policies do so because they are mistaken and not because they are adamantly hostile.

Publicly the leadership says that all will be forgiven to those who repent and adopt the new line, and that the days of dismissal and humiliation are over. Such is the implied explanation for the fact that there *are still half* a dozen or so well known hangovers from the Cultural Revolution officially on the politbureau.

Underneath this superficial calm, turbulent crosscurrents are flowing. Last December the ascendancy of the pragmatists seemed a foregone conclusion, when the Third Plenum of the Central Committee of the 11th Congress of the party met and confirmed the *personal standing* of Deng, both vis à vis Chairman Hua Guofeng, the nominal leader of the country, and the so-called "Whateverists."

The plenum decided to emphasise collective leadership and drop unnecessary honorifics, so that thereafter Hua's position was downgraded. It also rehabilitated some former distinguished leaders, one of whom, *Peng Dehuai (now dead)* was sacked by Mao in 1959 for attacking the 1958 Great Leap Forward. Peng's criticisms of *the Leap* were based on his investigations in Hunan province, where Hua at the time was deputy governor. That rehabilitation can hardly have been welcome.

Although the "Whateverists" retained their politbureau ranking at the plenum, they were diluted by some important new appointments, of which the key one was that of Chen Yun, China's leading planner of the 1950s. They lost their executive functions, and their apparent powerlessness was underlined by the new policies announced then of impending economic and legal reforms, which were clearly those of Deng.

But in March and April the pendulum moved the other way. The "Whateverists" on the politbureau, out of sight since December, began to reappear in public, a sure sign that their status was on the upswing. Deng had become vulnerable because two, and perhaps three, of his policies had run into trouble and lost him support.

The first was the new liberalism which had allowed the outbreak of posters in December. These escalated rapidly from permitted attacks on the Gang of Four to the questioning of Chinese policy in general and, in the New Year, to unruly manifestations of discontent.

But few of the people who swarmed round Democracy Wall in Peking were genuine political innovators. While the posters revealed a strong demand to right the personal wrongs done during the Cultural Revolution, to improve living standards and social conditions and to open up contracts with the outside world, it was the rare one that suggested alternative policies. Later, the emphasis of the demands moved still more towards amending social wrongs, particularly at the Spring Festival (Chinese New Year), when huge numbers of young people who had earlier been sent down to the countryside returned to the cities and refused to go back.

Inability

This outburst of feeling, plus the continuing inability of the local authorities to find jobs for the school leavers of 1977 and 1978, brought home to the central leadership the magnitude of the unemployment problem on their hands. In fact this appeared to be a much more serious threat than political dissidence, for the intellectuals, particularly the younger ones, were much more concerned about getting a job and making a niche for themselves and their families within the existing system than in setting out to change it. All the same, more traditional and less sophisticated leaders than Deng were panicked into demanding suppression, clearly believing that these liberalising trends were a mistake.

Deng was also in trouble at the time for the over-extension of the economy caused by the uncontrolled construction last year in the modernisation fever. Bottlenecks and shortages had become glaringly apparent, and the new freedoms for enterprises to negotiate independently for foreign equipment meant the alarming approach of a shortage of foreign exchange. A further possible embarrassment was the February invasion of Vietnam, which Deng had clearly favoured. It was by no means an unqualified success, causing large losses and some economic disruption, whatever its benefits in terms of foreign policy.

Evidently, then, in April Deng and his supporters were vulnerable. The top-level party working meeting that took place that month to reorder priorities probably saw fierce criticism and no doubt some hard bargaining But by June Deng had apparently quelled the opposition. The National People's Congress that month numbered among its achievements a new economic plan based largely on material incentives, a new body of law to confirm some rights to the individual, and the appointment of three new vice-premiers, all solid economists of 1950s vintage. There is no doubt that these were Deng's objectives, and that he now has a strengthened body of support at the top.

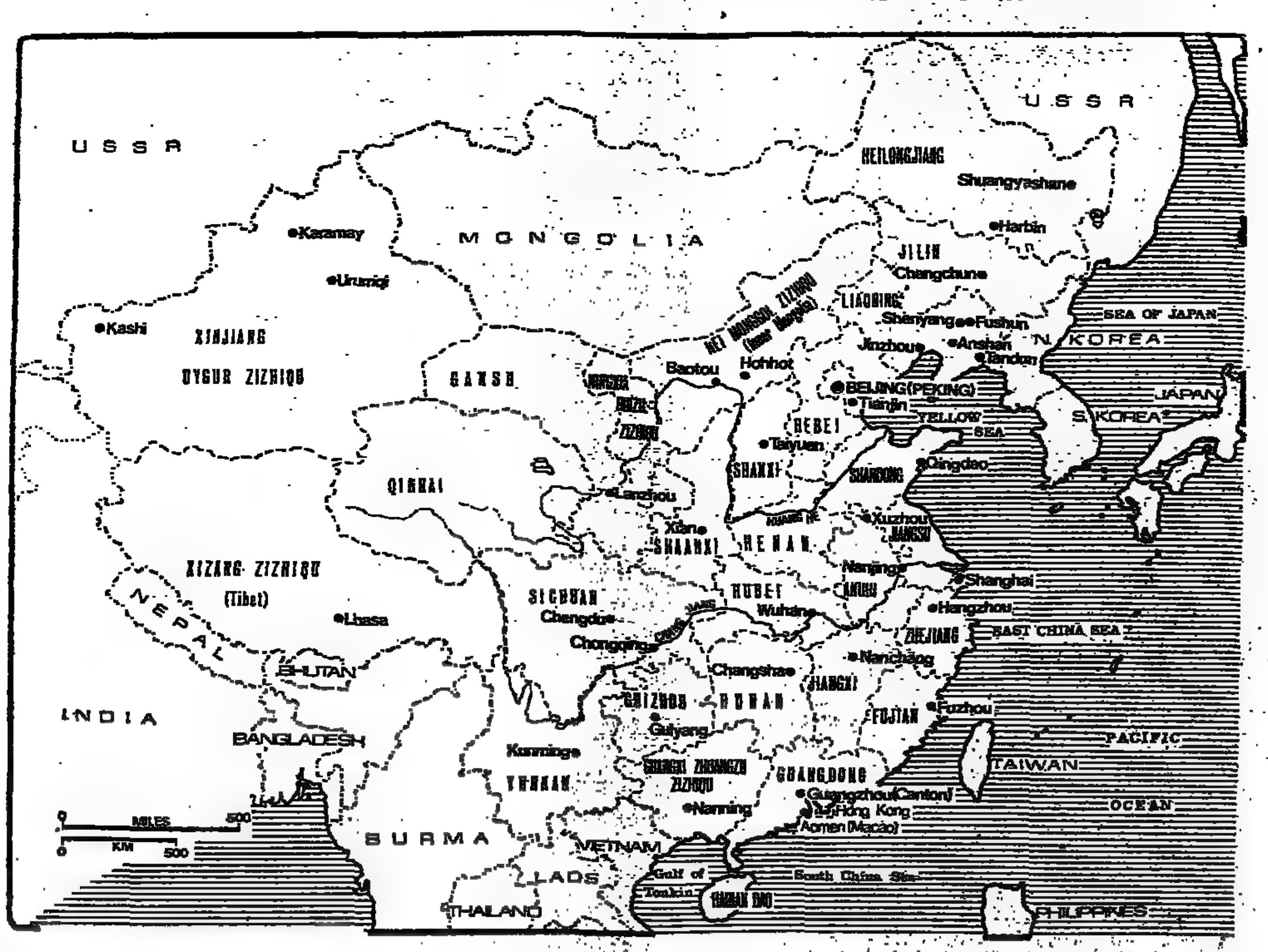
Nevertheless there is still substantial opposition to his ideas. The "Whateverists" remain in the leadership, in spite of renewed poster attacks in July on the most prominent Wang Dongxing, once Mao's bodyguard and leader of the elite army unit 8341. In addition Chairman Hua's position is ambiguous. He was once himself a "Whateverist," though before the term was coined. He holds both the top two posts in China, and however far he seems to have travelled to Deng's side since his accession to power in 1976, he still rose to his present position as a result of the sufferings of Deng and his friends. The continuing promotion of rehabilitated leaders—particularly Peng Zhen, who disappeared in 1966 and was once far closer to Mao than Hua has ever been—is a constant threat to his pre-eminence.

None of this might matter if the moderates in the leadership could be certain of carrying the country easily along with them in their new policies. But they cannot. Since the Congress, the Chinese Press has regularly blasted the "villains" and "arch-criminals" who oppose the policies of Deng. Some important provincial leaders have not abandoned traditional Maoism nor adopted the more-rewards-for-more-work ideas which are the foundation of Peking's present plans.

There are some, the People's Daily said emphatically in July, who actively pushed the Gang of Four's ultra-leftist line and still have not changed their stand, who "are accustomed to trimming their sails and manoeuvring among different groupings." In the rural areas there are "ultra-leftists" who might make a comeback since they "caused chaos" in March and April, describing the policies of Deng as "deviationist." And there is a vast mass of uneducated, inflexible officials whose main experience was in the Gang's period, accept it as normal and refuse to change.

Taken together, these constitute a formidable hurdle for the leadership to overcome. *Deng has a strong team in* Peking, but his policies are a gamble and could still be frustrated by hostility at the top and the opposition, fear and inertia of an influential minority distributed throughout China.

C.M.



COMPARATIVE BASIC STATISTICS

	CHINA	INDIA	U.S.
Area (m sq km)	9.6	3.3	9.4
Population (m)	975	626	217
GNP ($bn)	380 (est.)	103	1,762
Exports ($bn)	10.7	7.0	143.7
Imports ($bn)	12.0	8.3	172.9
Grain production (m tons)	305	126	267
Steel production (m tons)	32	10	124
Crude oil production (m tons)	104	11	482
Coal production (m tons)	618	102	660

Chairman Hua Guofeng

Vice-Premier Deng Xiaoping

Welcome partner

CONTINUED FROM PREVIOUS PAGE

Deng has got his followers into key posts as Vice Premiers or into the politbureau.

But it would be unwise to conclude from this apparent rapprochement that the hatchets have been buried. The radicals, who climbed up the ladder of power during the Cultural Revolution and supported Madame Mao and her three colleagues in the bitter struggles of 1976, remain strong. They are particularly strongly entrenched in the middle levels of the administration and the party machine, either biding their time or else actively opposing the changes now occurring.

The second factor is that Deng's policies will ultimately be judged on whether they achieve higher living standards. As a broad generalisation the Chinese are weary of Mao's type of moralising and want to see some rewards from their years of toil. The strongest card in Deng's favour is that his policies do respond to a long-term wish for higher living standards that has periodically raised its head over the past 30 years only to be pushed down by the puritanism of Mao and indeed of that streak of self-abnegation in the Chinese character to which he appealed.

Deng has bought immediate goodwill (and probably a lengthy breathing space) by raising rural and urban incomes by a sizeable amount. But over time, higher incomes have to be paid for out of higher agricultural and industrial output, which, as Mao found, move up only relatively slowly in a country like China.

The breathing space is needed to carry through the major reforms that Deng is attempting during these three years of adjustment. Most difficult of all will be the needed changes in attitudes they imply—attitudes, for instance, towards material incentives, managerial responsibility, foreign loans and investment—in a bureaucracy that is timid of change after the scars of the Cultural Revolution, burdened by the dead hand of orthodox Maoism and apprehensive of taking decisions itself. The "new" ideas are coming from men in the 1970s who had a brief chance to try them out when in power in the early 1950s.

They are not understood, *however, by most of the* established bureaucracy. They are even less understood by the generation of students who should have been at school or university between 1966-76 but who in practice picked up hardly any education because the schools were closed or in turmoil or the students had been sent down to the countryside. Finding them work in addition to the millions of jobs needed for the generation now entering the schools (the result of an explosion in the birth rate during the Cultural Revolution which is now reflected in an explosion in the school population) *is as big a headache* as feeding China's population.

Per capita GNP in China is now about $405. The country last year produced 3 cwt of steel a head, 6 cwt of cement, 7 cwt of chemical fertiliser; for every 1,000 people it produced eight bicycles, four sewing machines and 13 watches. On this admittedly crude basis, China fits into the category of middle level developing countries—attempting now like other developing countries to raise its national income by expanding its agricultural output; by upgrading its industry with the help of foreign technology; and by trying to pay for this by exporting more manufactured goods against the tide of a world recession. Developing countries have a way of muddling through.

But China is of course more than a developing country. It has 1bn people and is adding to its population at the rate of 10m-20m a year, which at a time of pressure on land and food throughout the world inevitably makes it a force in world politics. The exodus of refugees from China through Hong Kong this year, the war with Vietnam, the resistance of South *East Asian states* to a new wave of Chinese immigrants carried to the point of pushing them back to drown at sea can all be seen as part of an immense communal and population problem that will grow more troublesome as the years go by.

China is also seen by the Russians as a major security threat, a perception which in *itself draws China into the* West's calculation of the global strategic balance. In its efforts to find a counterbalance to the Russians, China is also being drawn deeper into a Pacific community of Japan, the U.S. and—as yet to an unknown extent—the newly industrialised countries of South Korea, Taiwan and Hong Kong.

In the last resort the West stands to gain substantially by the changes being made in China and by China's more open stance to the world. *If Deng* and his policies should fall, there is every chance that the pendulum would swing sadly back to another isolationist, xenophobic and repressive regime.

"Water isn't getting to those upstairs." A Shanghai daily newspaper's view of the disproportiate share taken by the USSR from Comecon membership.

Worldwide drive for new friends

FOREIGN POLICY

THE ECONOMIC policy of the new Chinese leadership is a legacy of the early 1950s. But in foreign policy it has struck out on a course that is entirely its own.

At no time in the past 30 years has China so abandoned the precepts of self-sufficiency or of aloofness from the non-Communist world as it has today—for a diplomacy by which it seeks to acquire the status and responsibilities of a major power. The normalisation of relations with the U.S., the Treaty of Friendship with Japan and the extensive tours its leaders have made through South-East Asia, Europe, Africa and the Middle East point to Peking's desire to strike up new alliances across the world. Moreover, for the first time in 17 years China has gone to war, launching in February what it described as a limited counter attack on Vietnam.

Linking these divers strands is the central belief of Chinese foreign policy—that the Soviet Union is an expansionist power determined to strangle China by encircling it and that it must be challenged at every stage in its advance. In the warnings of Vice-Premier Deng Xiaoping in Washington, in Peking's denunciations of detente and the SALT agreement as valueless, in the invasion of Vietnam itself, lie the same message of the need to resist Soviet ambitions.

Alliances

Thus China's response to the threat of Soviet encirclement has been to stake out its own network of alliances designed to outflank the Russians. Its invasion of Vietnam shortly after that country had signed a treaty of friendship with Russia was an attempt to demonstrate that such a treaty offers little guarantee of national security. The result of the action has been to make Indochina the new focal point of Sino-Soviet rivalry.

The opening of Sino-Soviet talks with a view to resolving outstanding differences does not lessen the deeper suspicion of the Russians that led China in April to abrogate its own 30-year Treaty of Friendship with the Soviet Union. But so long as the U.S. and other Western powers leave the door open to Moscow Peking feels it wise to do so as well.

The philosophy behind this policy was spelt out in Deng's speech to the UN in 1974—after China became a member of the UN and before Deng was ousted from power for a second time by radicals—which portrayed the world as divided into three groups. Deng picked out the Soviet Union as the most dangerous of the super powers, ready to precipitate a war with the U.S. and against which the second group of powers such as Japan, the EEC or China should be prepared to take a combined stand.

Peking has thus been pursuing new alliances to offset Russian power. In August it signed the Treaty of Peace and Friendship with Japan—thus officially at least ending any lingering resentment at Japan's invasion of China before World War II, but more important, signalling China's success in getting Japan to give preference to China over the Soviet Union in its relations with the two major Communist states.

The Japanese would have preferred parity of relationship in their ties with China and the Soviet Union because of the potential of the two countries' natural resources. But they ultimately went ahead with the treaty in spite of Russian opposition because of the Russians' unwillingness to show any accommodation in the dispute over the return to Japan of the Kurile Islands that the Russians occupied in the war.

In January, China and the U.S. unexpectedly announced that they had agreed to normalise relations. The roots for this move were laid during President Nixon's visit to China in 1972 but the discussions at the time left a number of questions about the future of Taiwan unsettled. During his visit to the U.S. Deng agreed to respect "the realities" of Taiwan without formally ruling out the use of force to annex the island. The U.S. abrogated its defence treaty with Taiwan but will continue to sell it arms. Though normalisation has been followed by cultural and trade agreements, the U.S. has resisted the initial Chinese attempt to present their close ties as the strengthening of the anti-Soviet bloc—or what in American terms has been known as "playing the China card."

But the Chinese have pursued their anti-Soviet drive through other channels. In August Chairman Hua Guofeng made his first tour abroad as Head of State to visit Yugoslavia, Romania and Iran—all countries on Russia's southern flank and suspicious of the growth of Soviet power. The Chinese have condemned the U.S. failure to stand up to the Russians in the Gulf region and have supported ideas of a Gulf security pact. They have championed Pakistan—possibly to the point of helping it to establish a nuclear capability. Their senior leaders have toured Africa and the EEC—with the EEC a long-term though vague trade agreement has been signed—and Hua is to visit West Europe in the autumn.

Parallel

Along with the goal of building up a network of relationships with the major industrialised powers has run the parallel aim of strengthening China itself through a modernisation programme drawing on foreign technology. This the leadership can claim to be enhancing rather than diminishing the familiar goal of self-sufficiency by a more active foreign policy.

Trade pacts — and more important, an increase in the volume of trade and the readiness of the Chinese to expand imports of capital plant through borrowing abroad — have followed the new diplomatic initiatives. That the Chinese in their first flush of enthusiasm for Western technology bit off more than they could chew does not alter the fundamental shift in attitude towards the importance of foreign trade in stimulating the economy.

Chinese policy in South-East Asia at first seemed of a piece with its building up of a network of friends and of attempting to deny advantages to the Soviet Union. But Peking was clearly caught off balance by the momentum of events that at first carried it into growing rivalry with Vietnam, then into a potential confrontation with the Soviet Union which signed a Treaty of Friendship with Vietnam, and then into a risky war with Vietnam.

The end of this saga is by no means in sight. Vice-Premier Li Xiannian has left open the possibility that China will repeat its punitive action against Vietnam—an enormously costly measure that the economy cannot afford but in which China feels its prestige and security are at stake. The repercussions of China's conflict with Vietnam and the accelerated flow of ethnic Chinese refugees from Indo-China in the first half of the year have also revived anti-Chinese communal feeling in South-East Asia — damaging to both the expatriate Chinese community and to Peking.

The Chinese carry much of the blame for the escalating rivalry in Indochina. Their support for Pol Pot's regime in Cambodia was at one level backing for Khmer nationalism against the extension of Vietnam's influence in Indochina and and was welcomed as such by other South-East Asian States anxious for an independent Cambodia as a buffer to an expansionist Vietnam. But it was also backing for an inhumane regime that had alienated world opinion and which in 1976/77 was carrying out provocative raids across Vietnam's frontiers.

China clumsily hoped to bring pressure on Vietnam by cutting off aid. Instead it pressed Vietnam further into the arms of Comecon and the Soviet Union. The protective stance it adopted in 1978 towards the Overseas Chinese communities of South-East Asia both gave Vietnam an excuse for rounding on its ethnic Chinese community as a fifth column and aroused anti-Chinese fears among other States, such as Malaysia and Indonesia with large Chinese communities.

China's actions increased Vietnam's irritation with Cambodia. But this was against a background of historic rivalry between the two States. In deciding to take over Cambodia through a lightning invasion in December, the Vietnamese could hardly have expectd that China would suffer this blow to their prestige without responsee. Indeed by enlisting Soviet support through the Treaty of Friendship the Vietnamese added to the provocation. But it is still a moot point whether China's counter-attack in February served its avowed purpose of teaching the Vietnamese a lesson.

The Chinese suffered far heavier casualties than they had expected and the fighting showed up the inadequacy of their equipment. They failed to get the Vietnamese to withdraw mainline divisions from Cambodia which would have weakened Vietnam's position in Cambodia. Though they demonstrated that the Russians were unwilling to rush to the aid of an ally, the war prompted a massive Russian-supported reinforcement of Vietnam's northern border.

The Vietnamese have since allowed Russian ships to dock at Cam Ranh Bay, the former American base and strategically important for the Russian fleet, whose nearest home port is Vladivostock. The Russians have greatly expanded their consular staff in Ho Chi Minh City (Saigon) to about 100. The invasion also did not deter the Vietnamese from carrying out another offensive in Cambodia or from expelling more ethnic Chinese.

As against this the Chinese carried out a virtual scorched earth policy in the parts of Vietnam they did occupy, causing severe damage to the already battered Vietnamese economy. They flattened four towns and destroyed an important phosphate mine and a tin mine. They have forced the Vietnamese to maintain their economy on a war footing and are still in a strong position to keep up pressure on Vietnam through aiding insurgencies in Cambodia and Laos. They also—in the ambivalent way that South-East Asian states regard Vietnam and China as both potentially hostile but to be played off against each other—won some merit in South-East Asia for standing up to Vietnam.

The ambitious nature of their foreign policy has inevitably raised questions as to whether the Chinese are overstretched in this area as they are in so many others. China has a large foreign service — Chou En-lai protected it from the worst ravages of the Cultural Revolution—but because of China's former emphasis on self-sufficiency it lacks experience. China's ability to gather and assess intelligence still seems weak. In South-East Asia Deng misjudged the risks that his ostentatious tour would arouse historic anti-Chinese fears in the region.

Though the West stands to gain by continuing Sino-Soviet rivalry, it has no wish to see this carried to the point of war with all the unforeseen repercussions that a Russian-Chinese conflict could have. There are plenty of potentially dangerous flashpoints in the region—the long and ill-marked Sino-Soviet border, the dispute between China and Vietnam over ownership of the Spratly and Paracel Islands in which Russian fleet movements in the South China Sea now lend visible weight to their support of the Vietnamese case, and the continuing confrontation between China and Vietnam over Indochina. The Chinese will have to learn that acceptance into the international community implies proceeding with caution.

D.H.

Reduced priority in national scheme

THE MILITARY

THE DEBATE over the role of the military in China has been resolved, at least temporarily, in favour of a low profile and priority to economic development as a whole instead of to defence.

Soon after the 1976 fall of the Gang of Four pressures for rapid modernisation of the army were apparent in articles in the military Press, but these seem to have been firmly put down. In the list of the "four modernisations," China's programme for updating the economy, in contrast to 1977 when it sometimes occupied third place, defence now consistently figures after agriculture, industry and science and technology.

This may sem to contradict the implications of the spring 1979 invasion of Vietnam, when the Chinese took on a conflict with the most experienced forces in Asia. But there are various explanations for this.

One is that when the Chinese see their foreign policy interests threatened they will not stop short of military action even if the apparent odds are against them.

Another is that the Chinese generals forced the conflict simply to show conclusively that their weaponry was out of date. And yet a third reason is that the Chinese have been so cut off that they did not realise how hampered they would be when up against the sophisticated electronic and optical weapons of the 1970s.

It remains to be seen how valid are the threats to teach Vietnam another lesson in the future. In the meantime no particular kudos has gone to the military in the February incursion. It had no effect, or perhaps even a negative one, on enhancing their status as a pressure group in China.

Since the end of the Cultural Revolution, when the army was brought in to restore order in the vacuum caused by the destruction of other authority, the party has been gradually replacing the army in the national power structure—to the point where, on the all-powerful Politbureau, civilians outnumber the active military by two-to-one (three new civilians were added as recently as last December).

In the provincial hierarchy, only a handful of military men now hold the vital provincial party first secretary post. There is a growing tendency to bring the army's party committees more and more within the civilian party's ambit by appointing civilian officials to the party commissar's job in the local military.

In the propaganda for domestic consumption, the mood of the leadership and of officials right down the hierarchy is of obvious enthusiasm for economic growth. By contrast, the occasional references to the Vietnamese affair seem to carry little weight.

Vietnam apart, the Chinese are really concerned only with defence, and for that they are partially prepared. They have had a nuclear deterrent since 1964. They are thought to have 50-60 MREMs (theirCSS-1, with a range of 950 km), 50-60 IRBMs (CSS-2, with a range of 2,400 km) an extended-range missile, the CSS-3 (with a range of 6,500 km), not an ICBM but powerful enough to launch a satellite.

They are also reported by the Japanese press to have a CSS-4, with a range of 11,000 km (which puts it in the ICBM class), but they are not known to have tested it.

So far they are thought to have deployed the CSS-1 and CSS-2 along the Sino-Soviet

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Modest improvement at best

LIVING STANDARDS

CHINA'S URBAN and rural workers are getting their heftiest wage increases in 20 years. The average wage of workers in State-owned enterprises rose 7 per cent last year, according to statistics released during the recent National Party Congress meeting, and further increases are in the pipeline.

Because of Mao's "rational low wage policy" there has been only one other increase in industrial wages since 1963 and that was for those at the bottom of the scale.

The income of commune members (excluding any additional earnings they might get from marketing the produce of their own backyard plots) was said to have risen by 13.7 per cent. The rise should be much bigger this year as a result of the 20 per cent increase in the State procurement price for grain and higher increases for other agricultural products.

But how much are living standards improving? The emphasis that the leadership is putting on promises of more pie to extract more work is one sign that up to now most Chinese have seen scant personal benefit from so many years of turmoil and hard toil.

Standards of living are one of the hardest things to measure in any country The Chinese in the past have discouraged prying Western eyes. This article draws on work published by Dr. Christopher Howe (one of the few Western scholars to have done research on living standards in China), recent figures published by the Chinese and our own inquiries (impressionistic like those of any visitor to China and limited by what the Chinese permit a visitor to see).

Average

At the NPC meeting, Vice-premier Yu Qiuli said that the average wage of an industrial worker in a State enterprise (the elite of the urban workforce) was 644 Yuan ($399). This is 54 Yuan a month. The last time the Chinese announced an official figure for the average wage was in 1976, when they said it was 60 Yuan a month. The new figure confirms what has long been suspected in the West that in the past, the Chinese have been exaggerating the average level of industrial wages

Dr. Howe has calculated that, in real terms, the average industrial wage actually fell between 1957 and 1974. This decline was due to a combination of the freeze on wages and of slowly rising prices for some consumer goods, meat, vegetables and canteen meals. Almost certainly this decline continued until the first increase in wages in 1977 which resulted in a 10 per cent rise for the lowest 40 per cent of workers.

Among factories we visited we were given the following average wages: Shoudu Steelworks, 63 Yuan; Anshan Iron and Steel Company, 64 Yuan; Shenyang No. 1 Machine Tool Plant, 60 Yuan; Steam Turbine Plant, Shanghai, 60 Yuan; and the Chengdu Measurement Instruments factory, 55 Yuan.

At the Shenyang Machine Tool Plant the wages being paid to each of the eight grades of workers were the same as those reported by other visitors in 1972 and 1973, reflecting an unchanged national pay scale. The present wage rise is being implemented by pushing workers up a grade, so pushing up the average wage. In the past 20 years one reason that the average wage has been declining even in nominal terms is that those who retired from the upper grades were never replaced.

A family having to survive on the earnings of only one wage winner is living in China at little more than subsistence level. A 64-year-old attendant working behind the counter of a department store in Chengdu earned 57 Yuan a month. He had a wife in hospital and two daughters to support.

After buying food (in Chengdu this would have been mainly rationed grain and some vegetables), he had little left over for new clothing. He paid 1.96 Yuan a month in rent. He said he just managed to get by and his one luxury was a radio.

But of 10 people we picked at random to question at department stores in Chengdu and Anshan, he was the only one to be the sole wage earner in his family. An elderly workman with a job in a mining machinery repair shop in Anshan had two daughters as well but a family income of 120 yuan. He claimed to be saving 30 yuan a month and was hoping to buy a television.

A young recently married workman with a job in a packaging factory claimed a household income of 100 yuan and said he had 200 yuan in the bank. A warden in a great white panda park in the Himalayan foothills who was visiting Chengdu said he earned only 14.50 yuan a month. But in his family of six, his wife earned 20 yuan and a daughter 37 yuan. He claimed to have 200 yuan in the bank.

The striking fact about most of those we spoke to was their relatively high level of savings—either the result of "responding to the State's call to save more" or because there have not been the consumer goods in the shops on which to spend their money.

Thus though average individual urban incomes have only recently started to rise, family incomes seem to have been growing more because more people have been working. A senior official in Shenyang municipality told us that whereas in 1965 there were an average 1.55 people working in a family, there were now 2.34. Also, the number of dependants that each employee has to support has dropped.

A further factor making for higher incomes in some cases has been the reinstatement of bonus payments. In the Shenyang Machine Tool Plant there is an average annual bonus of 20 yuan and a monthly bonus of 5-15 yuan.

Rural incomes are far lower than urban incomes and vary more from province to province. Wage policy over the last 20 years—and one being continued by the present leadership—is to try to diminish the gap in order to get the peasants to produce more food.

Yu reported to the Congress that last year the per capita income of rural commune members was 74 Yuan. But this gives little guide to the wide differences in living standards. The bulk of the 100m people (a tenth of the population) whom Li Xiannian has referred to as undernourished would live, for instance, in the countryside. But at the Wusan commune outside Shenyang we were told that income per head was 190 Yuan of which the equivalent of 70 Yuan was taken in the form of a rice ration of 250 Kg. At a commune near Chengdu the average income was said to be 135 Yuan plus a 310 Kg allocation of rice. Both were prosperous communes.

Apart from the increase in State procurement prices, peasants now have more opportunity to increase their incomes by selling farm produce grown on their own vegetable patches and doing spare time work such as silk weaving. The "free markets" that have sprung up in Shanghai, Shenyang and other cities over the last year are a sign of the increasing numbers of peasants who are bringing vegetables to sell privately in local urban areas.

In an effort to measure how far living standards have improved in China, Dr. Howe has constructed a personal consumption index weighted for items in the household budget (food, clothing, fuel, consumer goods, housing) and some welfare items such as health and education that are wholly or partly subsidised. On the basis of this there has been a modest rise in personal consumption of about 1.7 per cent a year from 1952-74.

Rising

Grain consumption per head has barely risen — indeed the level of grain imports has been rising significantly to meet the additional demand of population growth—and is only about 25 per cent above that of Bangla Desh.

Housing certainly has not kept pace with population growth. In and around Chengdu there are slums comparable to many cities in South East Asia. The growth in living standards, Dr. Howe argues, has come from the improvement in welfare services and increased consumption of secondary foodstuffs such as meat, oil, fish and increased purchases of manufactured consumer goods.

There is plenty of evidence that the Chinese are anxious to buy more consumer goods — if only they can get them. The manager of the No. 1 Department Store in the Nanking Road in Shanghai, one of the larger stores in probably China's most fashion-conscious town (where girls pay 2.50 Yuan for a hair perm and enviously eye the smart shoes being packed for export), points to a dramatic rise in turnover in the last three years.

Sales increased from 136m Yuan in 1977 to 163m Yuan in 1978 and a projected 200m Yuan this year. He says he would sell far more goods if supplies were unlimited.

But he is allocated only 300-400 television sets a month (retail prices range from 2,900 Yuan for a 20-inch imported colour set to 500 Yuan for a 12-inch Chinese-made black-and-white one).

For televisions, bicycles, sewing machines and gym shoes a complicated rationing system is in force. Potential purchasers have to have a certificate of authority from their work place which in turn has a monthly quota for its staff of these sought-after items. The better brands of shirts, watches and radios are snapped up quickly after being put on the shelf.

The manager denies that these shortages lead to a black market. Almost certainly they do, and almost certainly as well, this pent-up consumer demand which has been suppressed for so long, partly through fear that conspicuous consumption risked political damnation, will generate increasing inflation.

Unless prices can be held in check the Chinese will find both their wage increases and their savings nibbled into by inflation.

Largely in the hope of preventing this—and the political backlash that would accompany it—the leadership is encouraging the expansion of light industry. Indeed, to judge from a recent commentary in the Chinese Press, after the slow industrial growth of the first half of 1979, the government is looking to a consumer-led recovery to bring the industrial growth rate for the year up to the planned 8 per cent. The puritan Mao would never have approved of that.

D.H.

A generation lost

EDUCATION

LISTEN TO the tale of Mrs. Tao Duanyu. She is Director of Education in the province of Sichuan—a post which, since the province has a population of 98m, would entitle her to Ministerial rank in almost any other part of the world.

She was a member of the Communist underground movement in Hubei province in the 1930s. She then joined the 8th Route Army and went to Yenan, which Mao had made his headquarters in 1937. She won distinction there for running a school whose success was praised by the propaganda department of the Central Committee of the Communist Party.

After the war she helped build up the education system of Sichuan. This was the glorious period as she remembers it—not so glorious we would think, as most of the books then in use in schools were Chinese translations of Stalinist texts—when you could see "the merits of the socialist system." Like many Chinese of the older generation, she retains a wide knowledge of and deep pride in China's culture and history.

In 1966 came the Cultural Revolution and ten years of upheaval. Education officials were imprisoned and teachers denounced as "stinking intellectuals." She herself was arrested as a "close follower of the revisionists," made to do manual labour and then sent to work on a farm. Afterwards there followed a period in which she was put in a concentration camp as a counter-revolutionary, confined to a cell and allowed no exercise apart from walking in file three times a day to collect her meals.

In 1971 she was released. But the turmoil in Sichuan did not end then. Many feel the worst years in the province were 1974, when the Gang of Four was trying to gain ascendancy, and 1976, during the power struggles at the time of Chairman Mao's death. For teachers one of the worst periods was in 1974 after Madame Mao had urged primary school students to revolt against their teachers following a complaint by a Peking high shcool student that she had been harshly treated by a teacher.

As Mrs. Tao tells it, many school buildings were damaged and some burnt in the faction fighting. Equipment and books were destroyed. From about 1967 until 1971 all schools taking children above middle grade (from 13 to 17 years, though most children leave at 15) were closed. In the middle grade the emphasis was on practical work. "Physics was three machines and a pump, tractors, diesel engines and an electrical machine. The teaching was modelled around these. If a student could drive a tractor he passed." Teachers felt it was impossible to teach and students were encouraged not to learn.

Sichuan was one of the provinces worst affected by the Cultural Revolution — though there does not seem to have been the same large-scale recruitment of peasants and workers for teaching posts which has left the even greater burden in some parts of China of a leaden teaching force that needs to be educated itself. It is difficult to think of any comparable post-war situation in which a country — least of all a country of 1bn people which can lay claim to probably the longest tradition of education of any civilisation — has so destroyed the structure of its school and university system.

The consequences are that China has a "lost generation" of restless, semi-literate youth for whom there is no slot in the social and economic system and who are relegated to the countryside. It is desperately short of qualified teachers, with the repercussions that this will have on future generations of teachers. It is short of skilled workers, managers and technicians with the basis of knowledge to master and diffuse the foreign technology it wants to absorb.

At Fudan University, the best in Shanghai and one of the best in the country, officials in the office of the Vice President told us that they hoped that, by 1980/81 university standards would be restored to the level of 1966. That is almost certainly wishful thinking. Entrance standards are still much lower. The university course is four years compared with five before the Cultural Revolution. In the English faculty about half the teachers were recruited during the Cultural Revolution and were described by a colleague as of being about the same standard as a second-year university student before the Cultural Revolution.

The Academy of Agricultural Sciences—one of the focal points of agricultural research in the country—only resumed work last year. Its senior members told us it had been dissolved on the grounds that the country should rely on its peasants alone and not its intellectuals. "The more knowledge you have," the radicals said, "the more capitalist you will be."

Peking's Institute of Economic Research was also just resurfacing after its long winter. With the touching but almost child-like enthusiasm of academics desperate for knowledge from which they had been long deprived we were questioned about what had been happening in the world outside —monetarism, Friedman, the European Community, the European Monetary System.

Mao had a point, however, when he launched the Cultural Revolution — in that Chinese education was too formalistic and too detached from the practicalities of life. The irony now is that the pendulum has swung back to a formalism that would be unacceptable in Europe or the U.S. today.

At a primary school in Sichuan (under Mrs. Tao's control), the first-year students were the first class to have received the new unified textbook on which the reformed Chinese education system is being based. But the children sat bolt upright with their hands behind their backs as the teacher spoke.

At Fudan University the lecturer in the English department read his students a text and then said "Here are some questions to see how well you can remember." The emphasis is on learning by rote, on preparing texts that can be rolled out during the increasing number of examinations, and on streaming.

Competition to get into universities is also stiff. Over 6m students sat the national university entrance exam last year, of whom 292,000 got places. Once there, they work hard in the hope of getting high marks and a good job when they graduate. The student unrest of the last year which erupted on Democracy Wall in Peking or in the demonstrations in Shanghai did not come from the universities but from the unemployed youth desperate to return from the countryside.

Industry tries to make up for the poor quality of its student intake by running training courses in schools attached to factories. Mrs. Tao talks of creating new vocational colleges in Sichuan. The Chinese are still anxious to send students abroad for higher education—though the numbers have been trimmed back from the large figures being mentioned last year.

Deng is certainly anxious to see more intellectual ferment in China and was saying so openly in 1975. Mrs. Tao would agree. But intellectual values have been buried for a long time in China and it will probably take just as long before a new generation regains them.

D.H.

Reduced priority

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border and only a few, if any, of the CSS-3s. More important is whether the Chinese nuclear capability would survive a Soviet first strike; the CSS-1 is vulnerable and slow to launch and the CSS-2, while it can be kept fuelled and covered, still seems to rely on dispersal and mobility for protection.

More likely than a nuclear attack would be a lightning overland strike by the Soviet Union which they are poorly equipped to handle. Chinese forces are large — the army is more than 3m strong—but they have few armoured personnel carriers or trucks, and normally go on foot or by train. They lack modern anti-tank weapons and their main tank, the T59, is based on a Russian design of the 1950s. Their aircraft are chiefly MiG 17s and 19s, of the same date, plus a few MiG 21s and Chinese-built F9s.

In recent years the Chinese are thought to have reduced their defence spending simply because they no longer saw any point in continuing to produce obsolete weapons. However, this year saw a small change as at the National People's Congress, the Minister of Finance Zhang Zhingfu said in his budget speech that the allocation to defence would rise to 20bn Yuan (17.8 per cent of the total budget) because of the Vietnam incursion.

While observers believe that there is probably additional defence spending hidden in the heavy industry budget and elsewhere, the most important factor for modernising Chinese forces is the ration they will get of Peking's foreign exchange resources, and this was not discussed.

For Chinese policy is in effect to shelve its conventional domestic arms industry and to plug the obvious gaps in hardware from abroad. It is clearly not possible to do a full-scale re-equipment this way; it might cost up to $300bn and the available suppliers could not produce the quantity required. The U.S. has said already that it will not sell arms to China, as has West Germany (because of Soviet proximity), which leaves Britain and France, with Italy as a possibility.

Chinese military delegations have been coming to Britain with increasing frequency since Marshal of the RAF Sir Neil Cameron went to China last year and made his famous remark about the common enemy in Moscow. One of the most important was the 40-strong aircraft mission last autumn, and the most senior (though not specifically military) was the group led by Vice-Premier (and now Politbureau member) Wang Zhen, who showed particular interest in the Harrier jump-jet fighter.

Useful

The Harrier would be particularly useful to the Chinese because it requires no airstrips. Because of its limited range, it is viewed as a weapon of defence rather than attack. In the Chinese forces it would probably function as a patrol aircraft along the Sino-Soviet border, where it could easily be concealed on the ground.

Low-key discussions on the sale of the Harrier have continued, with the Chinese reducing their requirements for aircraft and showing increasing interest in production facilities. This is common to all their trade talks at present, in which they are attempting to buy technology rather than equipment in order to save foreign exchange.

The Chinese also appear to be interested in marine diesel engines, anti-tank missiles, radar equipment, improvements to their own tanks (they are thought to have a new tank design in mind) and a host of other items, such as night vision equipment, that their visiting missions have seen and commented upon during visits to Britain.

No decisions have been taken yet by the Chinese because the leadership is still hammering out its priorities, but individual missions appear at last to be drawing up short lists, with a view to buying small quantities of equipment that they would like to see tried out. No agreements seem likely before the autumn.

The same timetable probably also applies to French arms sales to China. Originally discussed by the Prime Minister, M. Raymond Barre, on his visit to Peking in January, 1978, these are expected to include Hot and Milan anti-tank missiles as well as anti-aircraft missiles, worth an estimated $350m. Like other equipment deals, these have been frozen for the last six months.

Earlier, the Chinese showed interest in the Mirage 2000 but, like the British Government, the French told Peking that they were prepared to supply defensive weapons only.

If and when the French and British deals materialise, their size in relation to contracts for other industrial equipment will be a strong indication of where China's true priorities lie.

C.M.

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Strategy for the next three years

ALMOST 30 years have passed since the founding of the People's Republic, yet . . . we have achieved far less than we should have.—Chairman Hua Guofeng.

The main problem now facing us is that our agricultural expansion cannot as yet keep up with the needs of industrial development, and at times cannot even keep up with the needs of a growing population. Many important products of the light and textile industries are insufficient in quantity, poor in quality and limited in variety, so there are not enough marketable goods.—Chairman Hua Guofeng.

Capital construction is too large in scale and spread over too many projects for the country's financial and material resources at present, and returns from investment are very unsatisfactory. — Zhang Jingfu, Minister of Finance.

In management, there is shocking confusion and waste in some production units and in some organisations not engaged in production. Zhang Jingfu.

Enterprises which turn out low-quality, high-cost, unwanted goods and show a deficit must undergo a shake-up. Some should cease operation, while others may be amalgamated, or change over to other products.—Vice-Premier Yu Qiuli, Head of the State Planning Commission.

Twenty-four per cent of our State industrial enterprises are run at varying degrees of loss.—Chairman Hua Guofeng.

SPEAKERS at the National People's Congress in June had plenty of good things to say about the Chinese economy—not least about the way it has been run during the past two years since the present leadership has been in full control. But the novel feature, as the above quotations show, was that they also told us what was wrong, and often in blunter language than that used by most Western commentators.

The new leadership has now given itself three years to put things right—three years of "readjustment, restructuring, consolidation and improvement" starting from January 1979—in which in Western terms it will accept deflationary policies of slower growth.

In that time the leadership hopes to cut back some of the surplus fat from the country's inefficient Soviet-style system of management, direct funds to sectors where the returns on investment are highest, and extract increased productivity both on the land and in industry. The key strands of policy during these three years are:

● **Increasing agricultural incomes.** On official Chinese figures, per capita incomes of commune members rose by 13.7 per cent in 1978 over the previous year to 73.9 yuan. During the current year the State procurement price for grain is being raised by 20 per cent and for other farm products by an average of 24.8 per cent.

Vice-Premier Yu Qiuli claimed in his speech to the Congress that this amounted to the largest increase in farm prices since independence 30 years ago. It is being backed by a substantial increase in investment in agriculture which will absorb 14 per cent of the capital construction budget as compared with 10.7 per cent last year.

Food

As Hua's speech implied, China needs to grow more food to feed its growing population and to give its urban workers an improved and more varied diet. Per capita grain consumption is only marginally above what it was 20 years ago. Vice-Premier Li Xiannian admitted recently that 100m people were still underfed.

In Guandong province, the southern province bordering Hong Kong, the official Press recently reported a sharp decline in State purchases of beef, ducks, eggs and other subsidiary farm products since 1965 and said that supplies to Canton were down.

At the same time the lagging of agricultural growth means that there are fewer agricultural commodities to export (buyers at this year's Canton fair found a shortage of supplies) and that the expansion of light industry is curtailed by an insufficient flow of raw materials.

In effect, the deal being proposed to China's 800m peasants, weary from years of turmoil and exhortation to still greater effort, is an offer of higher living standards and more consumer goods if they work harder and produce more. The success of the deal is central to the whole economic strategy. It is also the most important test of Peking's new reliance on the price mechanism to get higher yields. The radicals within the party are still denouncing this use of material incentives.

Beyond this difficulty is that the implied increase in trade between countryside and town will require a far more efficient distribution and transport network than now exists.

● **Higher wages for industrial workers and bigger bonuses for those who are the most efficient.** Average wages for employees in State industries rose by 7 per cent in 1978 over 1977 to 644 Yuan, and further increases are in the pipeline. But Hua implied that workers should not pitch their expectations too high and should understand the country's difficulties.

The bait of higher incomes is also an attempt to prod a workforce with a long record of go-slows, strikes, non-attendance and shoddy performance into working harder and more purposefully. The resistance of the Maoist radicals to discriminatory bonuses awarded on merit is far stronger in industry than it is in the countryside.

● **Priority in the allocation of funds and raw materials to light rather than heavy industry.** The main purpose of this is to ensure that sufficient consumer goods are available to soak up the growth in incomes and so produce a tangible increase in living standards. Light industry also offers a faster return on investment and greater potential for exports.

As a result light industry and textiles are to get first call on supplies of raw materials and, more importantly, of fuel and power. Their import allocation for supplies of raw material and semi-processed goods has been raised by 17 per cent this year.

Surprisingly, the proportion of State capital investment going to light industry has been raised only marginally from 5.4 per cent in 1978 to 5.8 per cent in 1979. But there are likely to be larger increases in provincial budgets. However the small increase in the State allocation does reflect the constraints in expanding light industry when the bulk of managers and engineers have been trained in heavy industry.

Decision

● **The deliberate decision to allow some slack in the economy.** One result of the rapid recovery of the last two years—in which industry recorded well above average growth rates of 13 and 14 per cent—was a widespread overstretching of capacity.

Construction projects were left half-finished because of shortages of building materials, fuel and power were unnecessarily used to produce goods that were not wanted, quality suffered as factories attempted to achieve their production targets and the rail network was congested. In short, there was a great deal of waste in an ill-co-ordinated programme.

Supporting the high growth rates was an increase in the State's capital construction budget, by 34 per cent over 1977 to 39.5bn Yuan. This year it is being held practically constant at 40bn Yuan. Yu Qiuli's speech suggests that nationwide there may even be a reduction in construction expenditure when local budgets and other outlays are included.

Within the State budget, the highest allocations are focused on where the bottlenecks have been greatest: coal, oil, electricity, transport and building material. Overall, however, the share of heavy industry in investment is being cut from 54.7 per cent in 1978 to 46.8 per cent this year.

● **Overhauling the bureaucracy and establishing new methods of accountability and control for the vast array of organisations and enterprises that fall under the State.** Zhang Jingfu said: "Where there should be centralisation there isn't, and where there should be decentralisation, it's missing." Chinese officials also testify to the jealous competition between ministries and to the overlapping responsibilities of central and local authorities none of whose powers of decision are clearly defined.

Reforms intended include more decentralisation to the provinces; allowing State enterprises more independence in management and greater control over their funds; encouraging the use of market concepts as a more rational base for decision making; using the banking system to exert tighter financial control; and establishing new semi-autonomous organisations to cut through red tape.

● **A stronger foreign trade sector.** Foreign trade as a proportion of GNP has been slipping from an already small 5.2 per cent in 1959 to only 3.7 per cent in 1978. The intention is to reverse that trend. Although there has been a shift back towards emphasising self-sufficiency this year after the headlong plunge towards imports of foreign technology initiated by Deng last year—as a short cut to faster growth — China is still looking towards a substantial increase in plant imports.

The value of imports is expected to rise this year by 32 per cent to \$14.3bn. At the same time the government is putting more muscle into increasing export earnings and looking to new avenues of compensation trade, joint ventures and tourism to achieve it.

Exports are planned to increase 14.7 per cent over last year to \$11.1bn. This still leaves a substantial trade deficit, part of which will be covered by increased borrowing. Western experts reckon that Peking is prepared for a ceiling of \$25-\$30bn of outstanding debt by 1985. But, how far it is prepared to borrow, clearly will depend heavily on the success of offshore oil exploration.

This stabilisation programme is largely the work of Chen Yun, the 79-year-old official brought back to high office in December and made a Vice-premier in June with status probably second only to Deng. He carried through a similar programme of restructuring the economy and checking inflation in the early 1950s before Mao got impatient with what he judged was too slow a pace of change. The overstraining of the economy in the last two years and the recent increases in incomes for peasants and workers have again renewed the dangers of inflation.

Trouble

By December last year it was clear that the ambitious plans announced by Chairman Hua in February 1978 for completing 120 major capital projects by 1985 as a step towards transforming China into a major industrial power by the end of the century were running into trouble. Hua's approach was reminiscent of the same planning by assault that led to Mao's Great Leap Forward. So too was Deng's apparent faith in the power of foreign technology to achieve rapid modernisation.

The most foreseeable constraint to emerge was that China had not the foreign exchange to pay for the plant imports it was contemplating. By December China's prospective plant purchases from abroad added up to about \$40bn. But what caught the leadership more off balance was the speed at which the expanding economy had exhausted the possibilities of immediate growth and was running up against shortages of fuel, power, raw materials and rail transport that resulted in high-cost, low-quality production.

It was also clear that in spite of the first increase in wages in years China's industrial workforce was not prepared for another Herculean effort to meet unrealistic targets set by the leadership.

The June meeting of the National People's Congress effectively abandoned Hua's plan for crowding into the next eight years the same volume of capital investment that China had made in the previous 28. The best hope for the new strategy that is being put forward now is that its objectives are more modest and that it responds to the long-term wish of a great many Chinese for higher living standards.

Even before the Congress it was clear that the economy was slowing down considerably. Industrial output grew by 4.1 per cent in the first half of 1979 as compared with the same period in 1978. This was a third of the rate of the previous two years and well below the trend rate of 10 per cent achieved between 1952 and 1974.

The two years fit into the pattern of erratic growth—a familiar stop-go crisis—that has marked China's development over the past 30 years. The table, drawn mainly from Dr. Christopher Howe's immensely useful *China's Economy: A Basic Guide* (Elek Books) shows how far China has progressed in establishing an industrial base in the years since independence (1952 is taken as the base year because it was then that the economy had recovered from the worst effects of the war).

However, the crude statistics do not reflect the poor quality of much of China's industrial output, the slowness by comparison with other developing countries with which it has absorbed modern technology outside certain specialist sectors such as nuclear or missile development, or the advances it still has to make to become a significant exporter of manufactured goods.

Against this, the statistics also do not reflect that China has made greater strides than virtually any developing country towards reducing absolute poverty and equalising the distribution of wealth.

It is by no means clear that China can achieve such a massive turnabout as is implied in its programme of "readjustment" within the short space of three years, nor what growth rate it can sustain beyond that.

Three basic constraints limit the pace at which it can develop its economic potential. First, with only a tenth of its land surface is cultivable (and this already intensively farmed) there is no easy way that China can accelerate its growth in agriculture. Increases in output will depend on the slow process of putting more land under irrigation, of developing new high yield seeds, and of learning to apply fertilisers more scientifically.

Foreign experts believe that China will be lucky to obtain an annual 3 per cent increase in production which, with the country's population growing at about 1.5 per cent, does not leave much leeway for raising living standards and exporting more farm produce.

Second, China has a long uphill haul to develop a fuel and power system capable of sustaining industrial growth of 8-10 per cent.

Finally, China is a land of a billion people and vast spaces. Since independence the Communists have found no satisfactory way of administering it that both retains central control and leaves room for local initiative.

The traumas of the Cultural Revolution have left a bureaucracy nervous of innovation and timid to take decisions. The old men now at the top may wish to strike out bravely, but that is not the inclination of officials below them.

D.H.

SELECTED ECONOMIC INDICATORS

	1952	1957	1965	1970	1971	1972	1973	1974	1975	1976	1977		1978	
GNP (1977 \$bn)	92	128	172	244	261	273	308	320	342	342	370		407	*(590)
Population (m)	570	640	754	847	867	886	906	924	943	962	983		1,004	(975)
Per capita GNP (in 1977 \$)	162	201	228	288	301	308	341	346	363	355	377		405	*(605)
Agricultural production index	84	100	101	126	130	126	142	146	148	148	146		151	
Total grain (m tonnes)	161	191	194	243	246	240	266	275	284	285	286	(283)	295	(305)
Cotton (m tonnes)	1.3	1.6	1.6	2.0	2.2	2.1	2.6	2.5	2.4	2.3	2.0	(2.1)	2.2	(2.0)
Industrial production index	48	100	199	316	349	385	436	455	502	502	572		646	
Electric power (bn kWh)	7.3	19.3	42.0	72.0	86.0	93.0	101.0	108.0	121.0	128.0	141.0	(223)	162	(256)
Coal (m tonnes)	66.5	130.7	232.2	327.4	353.6	376.5	398.1	410.6	478.6	483.0	546.6	(550)	605	(618)
Crude oil (m tonnes)	0.4	1.5	11.0	28.2	36.7	43.1	54.8	65.8	74.3	83.6	90.3	(94)	100.3	(104)
Crude Steel (m tonnes)	1.3	5.4	12.2	17.8	21.0	23.0	25.0	21.0	24.0	21.0	24.0	(23.7)	31.7	(31.7)
Cement (m tonnes)	2.9	6.9	16.3	26.6	31.0	38.1	41.0	37.3	47.1	49.3	56.2	(55.6)	67.8	(65.2)
Foreign trade (current \$bn)	1.9	3.1	3.9	4.3	4.8	6.0	10.3	14.1	14.6	13.3	15.1		20.8	(22)
Exports, fob	0.9	1.6	2.0	2.1	2.5	3.2	5.1	6.7	7.2	7.3	8.0		10.2	(10.4)
Imports, cif	1.0	1.4	1.8	2.2	2.3	2.8	5.2	7.4	7.4	6.0	7.1		10.6	(11.5)

Source: CIA Economic indicators and China's State Statistical Bureau. The American figures are preliminary. The Chinese figures are in parentheses. * The Chinese figure for GNP is based on a statement by the Foreign Trade Ministry to the FT delegation that foreign trade accounted for 3.7 per cent of China's GNP in 1978. The Chinese authorities have not issued official figures for China's GNP.

Exchange rate \$1=yuan 1.62

Increasing autonomy for local authorities

PLANNING

CHINA FACES daunting planning difficulties because of its size, its intractable problems, its inadequate communications, and its shortage of trained planners resulting from long periods of political disruption. For 30 years it has had a planned economy, yet in the time only one five year plan, the first (whose targets were not published till the plan period was half over) has been satisfactorily completed. The second plan was overturned by Mao's Great Leap Forward; the third by the Cultural Revolution, the fourth by the Gang of Four and the fifth—now in progress—has been converted to "three years of readjustment" to clear up the imbalances which are the legacy of inadequate planning in the past.

The crucial importance of the economy has meant that ultimate decisions have been taken above the planning structure, by the party, presumably at Politbureau level. Hence the place has always been subject to political interference. Today, to try to get the planning right, the leadership has strengthened the economic element at the highest party level. The former leading planner of the 1980s, Chen Yun, was appointed to the key party post of vice-chairman last December, and other senior economic figures were promoted to the Politbureau at the same time.

Questions

Almost certainly it is this body, not the State Planning Commission, which is nominally in charge of planning, that settles specific questions such as the construction of large new plant and the role of foreign technology and investment, as well as the general principle of economic policy. In the past year or so senior academic economists have also played a part.

The planning system proper also operates at a high (but Government not party) level. The vertical hierarchy under which every enterprise reports only to its controlling ministry, and planning departments (which exist all the way down the strata of government—provincial, municipal, county) to the State Planning Commission, has meant that numerous problems have had to be discussed at State Council (cabinet) level. Only at State Council meetings do ministers responsible for the planning agencies meet regularly with the economic ministers. The disadvantage of this centralisation is that relatively small problems concerned with raw material or fuel supplies may have to take up State Council time.

This, and the numerous levels through which requests for a decision have to pass, have obviously slowed down the responsiveness of the enterprises to the country's needs. The Chengdu Measuring Instruments and Cutting Edge Plant, for instance, has divulged that it takes about a year to establish through a series of bureaus that a product is not meeting customers' requirements.

In spite of these difficulties, the Chinese economy has grown, mainly on the basis of one-year planning, at a long term rate of 6 per cent as compared with a 2 per cent increase in population. However, the leaders in Peking now admit freely it could have done much better. For the first time since 1959 Peking this year published a critical assessment of development so far and a detailed plan for the current year.

Peking also announced it was working on the next five year plan, 1981-85. It is now recognised that the qualitative leap needed by the Chinese economy can only be brought about by medium-term if not long-term planning, with investment in substantial, often foreign, plant whose construction will be spread over a number of years.

Such is the cost of these projects and their importance that they have to be centrally planned and controlled. Furthermore their requirements and output have to be clearly foreseen. The outburst of unscheduled capital construction last year, which partly caused this year's "readjustment," shows the inadequacy of the planning mechanism. A good example of a specific planning error was the purchase of new rolling mills for the steel complex at Wuhan from West Germany and Japan for which the power supply is now seen to be inadequate for full operation.

To help solve the high-level liaison problem the leadership set up a new body after the National People's Congress in June, the Economic and Finance Commission. This is intended to co-ordinate the work of the long-term planning body, the Planning Commission, of the short-term planners in the State Economic Commission (who run China's monthly plans), of the Capital Construction Commission, the People's Bank (China's domestic bank) and the Bank of China (its foreign arm). Chen Yun is the chairman of the new commission. Li Xiannian, one of China's top half-dozen leaders and a former Minister of Finance, is the vice-chairman, and the members include the ministers in charge of the other commissions.

Although China's medium and long-term planning has not provided the necessary constructive guidance, the short-term planning system has performed reasonably well, in spite of drastic political disruptions. This is because in the 1950s the Chinese took over from the Russians the central organisation of "material balances" under which the Peking planners annually match supply and demand of major items such as grain, fuel and raw materials, while planners lower down the scale work out the balance for less important commodities, and allocate to individual factories and communes their targets for the coming period. Having got this more or less right initially, the changes needed from year to year have been only a matter of adjustment.

The system works as follows: the country's enterprises are organised in a pyramid with the ministries and commissions at the apex. In the July-September period, managements forward their plan for raw material consumption and product output for the following year to the planning level to which they are subordinate, and these are forwarded up the hierarchy to the Planning Commission.

After detailed discussions between enterprises and planners, requirements and targets are adjusted. There will be shortfalls and surpluses at the provincial level, and these are balanced by the planners in Peking. Enterprises are supposed to report back every month to ensure that output is as planned and to receive an adjusted plan, but the delays at this stage almost certainly mean that overproduction and shortages ensue.

This system means that almost every item produced in China enters into someone's plan. To simplify these complex arrangements, since the beginning of this year the leadership has started to allow enterprises to market their own products outside the plan, permitting them to find their own customers and to keep a proportion of the profits. There has been widespread discussion of the role of the market economy, and while much of it has revolved round its place as a stimulus to production, it has obvious additional benefits in cutting down local planning work and attendant delays.

In his report to the NPC, Chairman Hua said that local authorities should be given more autonomy in planning, as well as in construction, finance, raw materials and foreign trade. This, he said, would cut out the many administrative organs that are "unwieldly, overlapping and inefficient." More daringly, in Sichuan 100 enterprises were singled out for an experiment in greater self management and allowed direct contact with customers, even foreign ones.

This has reportedly pushed their output increase in the first half of 1979 well ahead of the provincial average. This success will almost certainly reinforce Peking's intention to strengthen the central planning of major projects but at the same time allow a grass-roots market economy that will reduce the overall planning burden.

C.M.

A billion mouths to feed

AGRICULTURE

THE GROWTH of agriculture and the need to achieve a surplus of food over population is China's most basic economic problem. It is compounded by the fact that agriculture supplies a high proportion of the raw materials for light industry, which in turn provides about 40 per cent of the exports.

The growth of heavy industry also depends on agriculture since it has to feed an ever-growing urban population: and the raising of the standard of living is dependent on it since, for huge numbers of the rural population, a better life still means a better diet rather than more consumer hardware.

While the Chinese claim to have reduced the population increase to only 1 per cent, they currently admit to a population figure of 958m (the statistic published at the recent National People's Congress, minus the figure for the "province" of Taiwan). Some U.S. demographers believe on good grounds that the figure is well over 1bn.

Until recently, the increase rate was probably at least 2 per cent, which is not much less than the long-run trend of 2-2.5 per cent annual increase in grain production. Hence the extreme difficulty the leadership faces in trying to provide that most elementary factor in a rising standard of living: *feeding* the people better.

However, the leadership officially remains optimistic, but while it has abandoned the extravagant industrial targets it put out last year, it continues to put forward the 1985 planned grain output figure of 400m tons. This will require a 4 per cent increase annually in tonnage which the country seems unlikely to attain.

Grain production for 1978 was said at the recent Congress to be 304.75m tons, 7.8 per cent up on the previous year. If this figure is correct, it is a healthy increase and makes up for the bad years of 1975-77, when production stagnated owing to bad weather.

However, it has not put the Chinese much ahead; an annual 2.5 per cent increase since 1974 would have given them 303m tons, so they are barely ahead of the long-term trend. While there is no reason to think that the Chinese have misrepresented the total, they have revised the figure upwards several times since last autumn, which suggests at least an uncertain statistical reporting service.

Cautiously, China's planners have set a target for the current year of 312m tons, just 2.6 per cent above the figure for last year. If they can genuinely keep the population growth at 1 per cent, it should provide some scope for economic growth, but many observers still believe they have some way to go before they can induce the peasants to accept small families and rigorous birth control measures.

Modest

In fact the prospects for the current year are modest. In Sichuan only 80 per cent of the rice could be transplanted owing to drought. In the north China plain the wheat was planted late in very dry weather. Good spring rain brought over-rapid growth and problems such as small ears and aphid infestation.

In central China the crops were set back owing to the cold, wet spring, and in some places rice had to be replaced by wheat, though this damage could be repaired by good weather and a late autumn. Irrigation will have been affected since the drought last year meant that reservoir levels were low.

Most tellingly, however, the crops in the north-east, which last year produced a good slice of the big rise from 282m tons in 1977, are unlikely to repeat the jump since the late, cold spring has affected the spring wheat.

Peking's biggest worry is where future growth is to come from. China's well-watered, fertile land always has been intensively cultivated, and while modern methods such as powered irrigation and chemical fertilisers have made some difference, the limits on what can be achieved readily may be in sight already.

There is very little worthwhile new land that can be brought into cultivation. The density of habitation is already very high; in the Sichuan basin (admittedly the most densely-populated agricultural area of China) the average amount of farmland per head is 1.2 mu (6 mu=1 acre).

While China now has reasonable supplies of chemical fertiliser (8.7m tons produced last year, in terms of nutrient content) the experience required to use it properly is lacking. At communes outside Shenyang and Chengdu the peasants complained that it made the crops grow too quickly, with ears that were too small. Both communes would have liked more organic fertiliser.

These complaints are typical of peasant communities that are not using chemicals correctly. To do so requires knowledge and experience that the Chinese authorities are currently unable to supply.

The destruction of research and the denigration of the academic experts during the years of the Gang of Four has put the development of a good agricultural extension service back many years. While there is an elementary system of spreading agricultural techniques to the countryside from the academic research centres, no experts have been trained since the middle 1960s.

Development of improved seed strains has been via selection rather than breeding, and while the post-Mao attitudes to foreign techniques may mean the import of expertise and seed strains, it still takes some years to adapt these to Chinese conditions and climate.

Irrigation

More irrigation is one key to increased production, but the problem here is the difficulty of bringing water to the much more inaccessible areas remaining dry. Then there is the competition between the needs of the hydro-electric industry and agriculture—further offtake of water for farming would hamper power generation even more than it already does in dry spells.

In the north China plain, perennially dry but nonetheless a vital wheat-growing area, the sinking of tube wells has lowered the water table. There is some doubt about the capacity of rainfall and other water seepage to replace it, while unwise irrigation without adequate drainage has caused alkalinisation of the soil.

Mechanisation is another development that could help, although the government wisely has decided to give up the attempt to mechanise wholesale. In one locality, in the open plains of the north east, U.S.-style farm machinery has been used most successfully. Elsewhere in China, *though*, the fields are small and often terraced and machinery is not much use.

What the communes need is farm equipment to help them harvest one crop and put in another as fast as possible to step up multiple cropping. What they have at present is either too unreliable or too complicated. Tractors large and small seem to be used mainly for transport, while rice transplanters, each of which is manned by three people, are far from fully automated.

Rising government alarm at these constraints accounts for the redirection of economic policy this year towards bigger investment in agriculture and more incentives for the peasants. Last December, confronted with a rapidly over-expanding economy, the central committee revised its ambitious development plans in favour of a new priority for agriculture and light industry, much of which depends on agricultural raw materials.

The leadership decided to raise the prices paid to the peasants for produce, and cut the prices of farm inputs. This was swiftly followed by the announcement of a new policy to develop key areas selectively, and a growing stress on sideline production to supplement the basic grain allowance.

The "key areas" policy involves switching crops to land most suited to them, for instance cotton to the best cotton land and wheat to the best wheat land. But it is not easy to persuade peasants to give up growing food for cash crops even when they are promised adequate rations simply because in hungry years the government has fallen down on its word. Hence this logical but unpopular policy may take some time to put into effect.

There are reasonable prospects for raising sideline production, particularly in the livestock area. China last year claimed an inventory of 301m pigs, still less than half the target of one pig for every peasant. Official prices paid to the peasant have all gone up, and the reappearance of free markets means that prices can float freely.

How far China can go in this direction by relying on peasant initiative and keeping livestock fed mainly on household scraps remains to be seen, however. Peking clearly is thinking of bigger schemes, such as its proposed development of the grass lands in western China for improved animal husbandry.

One expert view of China's agriculture is that it may be as much as ten years before there is significant progress in growth. The training of a new generation of agricultural scientists, the development of experience in seed breeding and the proper use of fertilisers, and the construction of costly and difficult water control will take a long time to develop. In the meantime it *is* no wonder that one of China's main campaigns is pressing for rigorous population control.

C.M.

Traditional farming in Sichuan province. Despite lack of modern machinery China produces most of its own food.

Community role restored

BANKING

THE People's Bank of China, Peking's central bank and by far its most important banking organisation, has begun to resume and even expand the part it played in managing the economy before the disruptive era of the Gang of Four. As the leadership in Peking introduces more decentralisation, greater responsibility for savings, investment and for overseeing the fulfilment of contracts between enterprises, on which the whole interlocking economic system rests, will fall on local bank managers. The powers of the Bank are being strengthened to ensure that it can carry out these functions properly.

The People's Bank began its rehabilitation at an important banking conference last February. The conference report commented with devastating truth that "the efficiency of our banks lags behind that of the 17-year period preceding the Cultural Revolution and trails far behind banks in other parts of the world." The conference, summoned to instruct bank managers in how to play a positive role in the "readjustment" policy, announced tighter rules for loans, more disciplinary powers for managers to enforce banking regulations and higher interest rates from April 1 this year to attract more deposits.

Under the Gang of Four, the Bank's authority was completely undermined, as was that of all the economically-minded party and government leaders. According to sources in the Bank, the radical Gang attacked the deposit business by saying that anyone who put money in the bank should not get interest as it was part of capitalist exploitation (though interest was never officially abolished). Furthermore the Gang said that those who put too much money in the bank would inevitably become bourgeois, and added that strict terms for loans would lead to capitalism. Fear of seeming capitalist or bourgeois in that period of arbitrary accusation and arrest affected savings and loan policy, and the Bank's influence over the economy declined.

Following the Bank's rehabilitation since the Gang period, the leadership is attempting to use it as it did in the past, as a lever of control. The People's Bank is intended to operate in every stratum of the economy, and at the highest level it now plays a part in the formation of the state plan and the budget.

Planning in China is in physical rather than monetary terms, and the money supply is decided to suit the planned supply of goods, according to the system of material balances used in planning. The Bank is consulted to ensure that the currency in circulation is adjusted to the expected level of output and to examine construction plans to make certain that they do not get out of control, as they evidently did last year.

In the new era of readjustment the People's Bank sees itself as having three means of economic management. The first is attracting deposits to increase the funds available for loans (and incidentally reduce the likelihood of inflation). These have always been one of the Bank's main sources of funds, as personal savings get bigger every year. The total amount of savings at the end of 1978, according to sources in the Bank, was roughly 15 or 16 times that of 1952. Total accounts now number 88m.

From April 1 this year the People's Bank has raised interest rates substantially to over 5 per cent per annum for five-year deposits and just under 4 per cent for one year. Presumably to attract foreign depositors, Overseas Chinese get slightly better rates. These are worth more than their face value since there is no income tax in China. According to the Bank, these new measures have more than doubled the amount of money on deposit.

Source

Another source of funds is the money held in the accounts of industrial enterprises. As production increases, this source gets bigger and bigger. Yet a third is the savings by non-commercial enterprises (for example, the Foreign Ministry or other Government bodies). These are legally obliged to keep their funds in the Bank, and they do not draw interest on them.

The People's Bank's second management tool is its loan policy. Bank loans are a secondary but important source of funds for enterprises. The country's main capital construction funds do not come from the Bank, but from the appropriate planning level (central, municipal, provincial), in the form of grants. There is much discussion about whether the grant system should be changed to loans to make factory managers more accountable.

Working capital also comes in the form of non-repayable grants, but if the enterprise exceeds its grant it will have to borrow from the Bank. The newly reconstituted Construction Bank (it disappeared in the Cultural Revolution), which is funded out of the budget, makes interest-free loans. At the moment the People's Bank has taken on some of its responsibilities in financing collectively owned (as opposed to state-owned) enterprises. This is particularly important now as collective enterprises are being encouraged to help solve the serious unemployment problem.

Loans from the People's Bank are for a maximum of 12 months, and the terms are adjusted to the needs of the enterprise. The enterprise is expected to make a detailed report to the Bank and complete an application saying how it plans to use the loan and when it will be repaid. A branch bank below provincial level can decide on a loan provided it does not exceed its annual budget. If it does, the branch must apply to the next level up.

The Bank does not really play an advisory role in industry as it might in a Western economy. Although it has some experts in particular industrial fields (the steel industry, for instance), it mainly uses staff in other government departments to check on the efficiency of a particular enterprise.

The distribution of loans is normally dictated by the needs of the state plan, but the current policy is to give priority to enterprises which in the judgment of the Bank are the most successful. This is certainly an innovation in China, where previously the plan came first and inefficient enterprises were supported by the Bank to help them fulfil their targets because, even if non-commercial, they were thought to be necessary. The Bank now assesses the profitability of an enterprise and the extent to which its products are needed, either on the home market or for foreign trade. The most efficient factory making the most desirable goods gets the biggest and longest-term loan.

There is no doubt that this policy is being interpreted strictly. After the unscheduled outburst of capital construction last year (the funds for which did not come from the People's Bank, however, but from ill-planned state grants) the Bank is looking very carefully at loan applications. At the banking conference in Peking in February it was ruled that banks should have the power to refuse loans even though they might be recommended by a "leading comrade."

The Bank's third management tool is its control of the circulation of money. Besides being the bank of issue, it also supervises all transactions above 30 Yuan (just over £9), which according to the regulations must go through its books. If an enterprise does not pay for raw materials or products, the bank can either insist that it makes compensation or it can simply transfer the money out of its account. It can also prevent an enterprise making large profits through overcharging as this, too, will be obvious from its records.

In the same way the Bank can supervise output and construction. It can see from its books if too much raw material is being used, and it can criticise low quality. If its criticisms are ignored, it can stop loans or demand higher interest. Where construction is extravagant, it can either admonish an enterprise itself or, if this has no effect, refer the matter directly to the State Council. To avoid this situation, when planning takes place at the different levels of the hierarchy, the Bank must be consulted. Clearly, the People's Bank, with its 36,000 branches and 360,000 staff, is an influential organisation and one that will play an increasingly powerful role.

C.M.

Muddling through

INDUSTRY

MAINTAINING a high rate of investment in industry has been one of China's central priorities for the past 30 years. There is now a large, diversified industrial base and the country produces most of the materials, machinery and consumer goods that it needs; the fact that foreign trade represents less than 4 per cent of GNP illustrates the degree of independence that has been achieved.

But China's industrial performance has been held back by weaknesses in the planning system and in the management of individual enterprises. Because of political and ideological conflicts there has been an erratic approach to foreign technology.

There has been confusion, too, over the relative importance to be attached to capital-intensive, large-scale industry and small-scale rural industry. The result is a lack of balance which is aggravated by persistent shortages in basic sectors of the economy, notably electric power, transport and building materials.

The present régime has adopted an industrial policy which is designed gradually to eliminate these weaknesses and to set the economy on the road towards balanced development. The ultimate objectives are the same as they were in 1949—rapid economic growth and national independence, especially in defence—but the methods are based on a more realistic assessment of the skills, experience and resources which exist.

After the euphoria of early 1978, when a series of over-ambitious goals were proclaimed, it is realised that China cannot do everything at once. There is an urgent need to make full use of existing investment before embarking on massive new commitments.

The implications of this re-appraisal were evident at last month's National People's Congress. The first two points made by Vice-Premier Yu Qiuli in his comments on the 1979 economic plan were, first, that efforts should be concentrated on developing agriculture at higher speed and, second, that everything possible should be done to speed the growth of light industry.

The coal, petroleum, power, transport and building materials industries would be strengthened, but production in other industries "would be arranged in accordance with possible fuel and power supplies." The proportion of the central government budget going to heavy industry would be reduced.

The range of products covered by light industry is wide. It includes textiles, footwear, ceramics, handicrafts, canned foods, consumer electronics, bicycles, sewing machines and a host of other consumer items. Some of these activities were well established in China long before 1949; while there is a need for modern designs and modern technology, they pose fewer problems of management and organisation than steel or petro-chemical plants.

Vital

A rapid expansion of this sector serves several purposes which are vital to the Chinese economy over the next few years. Because it is labour-intensive, it will help to solve the unemployment problem. It provides an important market for the products of agriculture.

An improvement in the quantity and quality of Chinese consumer goods is necessary to meet the people's aspirations for higher standards of living.

Products of light industry, in which China has a comparative advantage, should be a dynamic element in the country's export trade, helping to finance imports of capital goods. Finally, investment in light industry should yield quicker returns than investment in high-technology heavy industry.

A recent editorial in the Workers Daily noted that between 1950 and 1977 profits and taxes paid to the central government by the light and textile industries accounted for 29 per cent of the state's revenues. This was equivalent to 70 per cent of the state's investment for capital construction and 14 times the investment in light and textile industries.

For each yuan spent on light and textile industries the state received 52 cents in the form of profits and taxes, compared to only six cents received from heavy industry. The editorial commented that the new priority for light industry would temporarily delay the growth of heavy industry, but "it will be more than compensated, because after eight or ten years funds for the construction of more heavy industrial enterprises will have been accumulated."

The switch of emphasis towards light industry cannot be achieved by government decree. The manufacturing operations may be relatively simple, but the task of mobilising the many thousands of small enterprises scattered around the country is formidable.

The bureaucracy, both central and local, has been geared to the needs of heavy industry; it is the managers of heavy industrial enterprises who know how to work the planning and allocation system. Moreover, if the manufacturers of light industrial products are to play a bigger part in satisfying consumer needs and in promoting exports, they will need to be responsive to changing market requirements.

It is in this sector more than any other that the planned, socialist economy has to be modified by the injection of market economy principles—a blend which the Chinese leaders say they are determined to achieve.

Direct contact with customers is essential. A model of what can be done is the Shanghai Leather Shoe Factory, which this year is exporting about 500,000 pairs of ladies' shoes to customers in Australia, the U.S., Hong Kong and elsewhere.

Not only are the designs and styles well suited to the world market but the managers appear to be in regular contact with their international customers and to be relatively free of the bureaucratic obstacles of which other enterprises complained. The factory has its own retail store in Shanghai.

In textiles, garments, food processing, toys and other branches of light industry there is scope for co-operation with foreign companies which can provide equipment, know-how and access to world markets. In electronics, particularly, the Chinese authorities are hoping that the new law on joint ventures will stimulate the inflow of foreign capital and technology.

Matsushita, the Japanese consumer electronics company which recently signed an agreement to manufacture TV sets in China, hopes to develop collaboration with the Chinese on a wide range of products, perhaps involving other Japanese manufacturers. At the same time the Chinese themselves are sending out missions to learn more about foreign markets—consumer tastes, distribution channels and marketing arrangements.

The expansion of light industry cannot take place without a reliable supply of equipment, components and materials from the heavy industrial enterprises. An improvement in the efficiency of heavy industry is one of the goals to be achieved during the three-year period of re-adjustment.

Visits to factories making machine tools, steam turbines and electronic computers show that the Chinese are capable of developing and manufacturing complex machinery on the basis of their own efforts, since they have generally moved beyond the original East European designs. While the policy of self-reliance has often been carried to extreme lengths, factories have shown remarkable ingenuity in overcoming production and supply problems.

Moreover, the managers of these plants are well aware of their technical shortcomings and have a pretty clear idea of what should be done about them. At the Shenyang No. 1 machine tool factory one of the products is a vertical multi-spindle semi-automatic lathe, used mainly in the automotive and tractor industries. In the workshop there is a large display which enables technicians and workers to compare in detail the specifications and performance of this machine with four comparable machine tools made in the U.S., the UK, Italy and the Soviet Union.

The need to reach internationally competitive levels of quality and reliability was strongly emphasised in this and other factories.

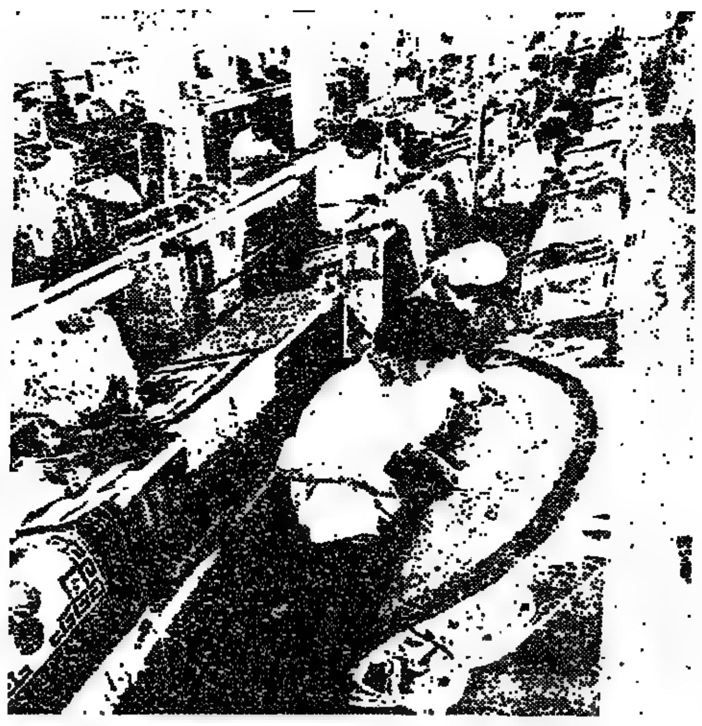
The selective application of foreign technology will be necessary to upgrade the performance of heavy industry. In the sectors which supply essential inputs to agriculture and light industry, such as fertilisers, synthetic fibres and plastic materials, China is continuing to place very large orders for complete plants with foreign companies. But for the most part China will probably use a combination of self-help and limited foreign aid to improve what they already have; farm machinery, where there is a need for more efficient engines, modern tractor designs and new production facilities, will be an interesting test of this policy.

At the same time China will apply a more rational approach to small-scale rural plants. In principle these plants play a useful role in using local materials and supplying local markets, especially in a country whose transport and distribution network is under-developed, but the product and technology must be appropriate to small-scale manufacture.

There is enormous scope for improving efficiency at all levels of Chinese industry. Yet it is striking how much has been achieved despite political disruptions and the difficulties imposed by centralised planning. Not only have the Chinese mastered some difficult technologies (especially but not exclusively in defence-related sectors), but they have shown a remarkable capacity for improvisation and muddling through.

Given a stable political environment, rational economic policies and, above all, patience, China is capable of developing a modern industry well-suited to the needs of the country.

G.O.



Woollen carpets being made in a Chinese factory

New mining projects await go-ahead

MINERALS

AT SIJIAYING in Hebei province, about 300 km east of Peking, a group of Americans from Kaiser Engineers is completing an engineering study of what will be—if the Chinese decide to go ahead with it—one of the world's largest open-pit iron ore mines. The ore is a complex mixture of martite and magnetite, and Kaiser's proposals involve benefication to increase the iron content from 28 per cent to 66 per cent. The depth of the pit will reach about 500 metres, and mining operations will involve shifting about 100m tonnes of material a year. In size, ore characteristics and type of equipment needed, it is similar to Cleveland Cliffs' Tilden mine in the upper peninsula of Michigan—which is one of the reasons Kaiser was chosen to do the work, since this company had engineered the Tilden project.

Kaiser's contract, signed last autumn was for the first phase of the project, to provide engineering services for the mine, concentrator, pellet plant and auxiliaries. The project team under Mr. Les Trew has been working out capital and operating costs, obtaining bids for the equipment and preparing a financing plan—all of which will be discussed with the China National Technical Import Corporation and the Ministry of Metallurgical Industry in the next few weeks.

Although steel has moved lower down the list of China's priorities, Kaiser Engineers has received no indication that the Sijiaying project will be deferred. The hope is that since China, despite its large reserves, is a net importer of iron ore, it will be seen as an import-saving project and will be carried through. Moreover China badly needs to update its ore mining technology, most of which dates from the 1940s and 1950s. The Sijiaying mine is situated close to a main railway line and is well placed for shipping pellets to steel plants in Shanghai and southern China.

The decision on Sijiaying will be a pointer to China's intentions on how fast the country's mineral resources are to be exploited. Another American company, Bethlehem Steel, is working on a similar iron ore project at Shuichang, also in Hebei province.

In non-ferrous metals, too, there is substantial scope for import-saving, but some of the reserves are in remote areas which will need large investments.

Traditionally China has been a substantial exporter of tungsten, tin, mercury and antimony, but production of these metals has tended to stagnate in recent years and new investment is badly needed.

There are known to be rich reserves of these four metals, as well as of manganese and molybdenum. There are also extensive deposits of aluminous ores, bismuth, gallium and titanium, together with large potential supplies of copper, lead and zinc.

According to a recent article in *China Reconstructs*, some important discoveries have been made in the past year. These include copper/lead/zinc in Sichuan; bauxite at Pingguo in Guanxi province; silver in Henan; copper in Xizang (Tibet); copper with potential reserves of more than 8m tonnes in Jiangxi; lead and zinc in the west of Yunnan. The same article refers to recent discoveries of nickel and chrome.

How quickly these deposits will be exploited is unknown. China is importing large quantities of aluminium, copper, nickel, chrome, lead and zinc. Numerous discussions have been held with foreign companies about mining projects, but few substantial contracts have yet been signed. Fluor of the U.S. is conducting an engineering and financing study for a big open-pit copper complex in Jiangxi province; this may be associated with a copper refinery on which Sumitomo Mining of Japan has been working.

Lurgi of Germany signed a framework agreement last November for non-ferrous metals development and the first few projects are now being negotiated. These include new equipment for mining, beneficiation and smelting which would be financed on a compensation trade basis, with ore concentrates and metals shipped from China and marketed by Lurgi's parent, Metallgesellschaft, one of the world's largest metal trading companies.

Two British groups, Charter-CJB and Seltrust Engineering, submitted proposals earlier this year for six mining projects. The former recently held further talks in Peking on four of these projects—a lead-zinc venture in Qinghai, tungsten in Hunan, tin in Yunnan and cobalt in Hainan Island.

It seems that the non-ferrous expansion programme will be phased over a longer period than had originally been intended, but the next few months should show how high a priority China now attaches to this sector. One of the questions remaining to be answered is how the use of compensation trading will be reconciled with China's large internal needs for non-ferrous metals.

G.O.

Burdens on the network

TRANSPORT

CHINA'S TRANSPORT system is far from adequate even for the present state of its economy. Peking's recognition of this is an important reason for the introduction of its economic "re-adjustment" policy. Belatedly it became aware that its rail and port facilities were groaning even under their present burden, and to increase it with a further load would be inviting disaster. Speaking with frankness remarkable even in the new climate, the New China News Agency noted in July that the capacity of many stretches of China's main railway lines had reached saturation point, and that some sections could only meet 50 per cent of demand.

Since 75 per cent of China's freight is thought to go by rail, this is a serious problem. As the railways provide the strategic mobility and logistic support for the army, which is deployed along them for lack of other transport, it is also a severe military handicap. The remaining 25 per cent goes by waterway and roads, and while the waterways are reasonably efficient, neither the roads nor the truck industry are anything like adequate for China's needs.

Peking has great difficulties to overcome in setting up a satisfactory national transport network. The sheer size of the country—(approximately 4,000 km from north to south and 4,800 km from east to west) is an enormous handicap, and it is increased by the fact that the main rivers run only from west to east. Hence these only provide arterial routes from the developed eastern half of the country to the interior, and act as a positive barrier between the urban centres.

The distribution of the country's raw materials and its pattern of industrial development have added to these problems. Most of the coal and iron ore now exploited is in north and north-east China, and the main industrial centres are in the north-east and down the eastern coastal belt.

But for political reasons most of the transport effort since 1949 has gone into building links with the western interior. While these also contain rich sources of raw materials, they do not have the infrastructure and skills to develop them quickly. Now that the leadership's main aim is to expand the economy fast, it is concentrating on the east, but the worn-out railway system is already verging on collapse.

The NCNA revealed that the lines east of the Peking-Canton track carry 85 per cent of the total volume of the country's rail freight, and over the years these lines have been neglected in favour of development elsewhere. On the over-burdened eastern stretches steel, coal, ore, imports, exports and consumer goods are seriously delayed while trains queue up or change their routes.

Decision

To try to solve these problems the Railway Ministry recently held a national conference which proposed the reconstruction and repair of old lines, the electrification of some major sections and the expansion of three important junctions, including Peking. But the vital question is how far the Chinese will actually be able to implement the decision when they have so many other pressing economic needs.

Even the rail links outside this eastern area are far from satisfactory despite the investment they have swallowed up. China still has only one main north-south line, from Peking to Canton. A second north-south route, from Taiyuan to Liuzhou, is still under construction after eight years of work. There are only two major east-west lines, from the east coast port of Lienyungang to Urumchi in the far west, and from Shanghai to Kunming. These are both of strategic importance since they lead to vital border defence areas, and must, therefore, be partly taken up with transporting military goods.

The railways' burden has been increased by inadequate general planning. For example, the 1.5m tons capacity steel plant at Panzehua in Sichuan province ships out all its products to Shanghai nearly 1,000 miles away for finishing, while the Metres and Cutting Edge Plant in Chengdu, also in Sichuan, ships in its special steels, sometimes from Shanghai but as often from Dalien in north-east China, frequently travelling the whole way by rail, a distance of well over 1,600 miles.

The bicycle is still the major means of transport for the Chinese, with nearly 3m cycles in Peking, a city of 10m people

This kind of shortsightedness still persists. One example is the recent planning of the $2bn Japanese-supplied steel works at Baoshan near Shanghai. Ore for the plant, when completed, will be shipped in from Australia, but the planned new port, which will handle 100,000-ton ore carriers, will be at Ningpo, over 100 miles away by sea and more than 200 by land. Even at the Shoudu steel plant near Peking, where raw materials come in from Tangshan, delays are endemic and the steelworks keeps an official permanently at Peking railway station to speed up delivery.

On the technical side the Chinese are apparently capable of making all their equipment, including electric locomotives. So far they operate only one electrified line (Chengdu to Paochi) but are planning at least four more, plus two which they discussed last year with the Japanese, Peking-Tianjin and Peking-Zhengzhou. The electrification and double-tracking of the Kowloon-Canton line has also been under discussion with British Rail.

Chinese railway problems appear to stem not so much from lack of technical knowledge, which is adequate for their needs, as from long delays in building and repair of worn track and equipment. The People's Liberation Army (PLA) railway corps is responsible for building new lines.

Factions

Maintenance is the job of the local railway bureaux, which come under the Railway Ministry, and during and after the Cultural Revolution these were heavily politicised and drawn into the factional fighting of the times. This affected the running of the trains, the repair of the lines and the loading and unloading of freight, to the point that immediately after the fall of the Gang of Four in 1976 China's most important junction at Zhengzhou had to be put under military control. While the present leadership is determined to get to grips with the railway problem, neither the long-standing lack of investment nor the endemic political difficulties can be solved in a day.

Waterway transport in China is traditional and appears to work reasonably well. Since the rivers and canals have already been exploited for hundreds of years, it is unlikely that there will be much expansion. The highway system is different. It is at present minimal, and apart from a few trunk routes like the road to Tibet, surfaced roads exist only in urban and suburban areas. Truck production, extremely low and inefficient by western standards, is commensurate with that. However, in its present drive to conserve oil Peking is unlikely to expand motor transport.

Aviation is an important means of communication in China (officials at all levels are constantly attending meetings, conferences and exhibitions all over the country), and the China Aviation Administration Corporation (CAAC) now flies 545 internal flights a week. Before the "readjustment" the Chinese were showing interest in the British Aerospace 146 feeder-liner and the Airbus, but this now seems to have evaporated. In any case, aviation is not significant for freight.

Relevant to China's internal transport is the state of the ports. Foreign ships still experience long delays because of poor equipment, and shallow waters mean that large carriers cannot be accommodated. Last year the Chinese approached the Danish company East Asiatic with a project for modernising eight ports, but this has been postponed. So, it seems, has the proposals to the Dutch Port and Delta Consortium, which was hoping for a $1bn harbour modernisation contract including the construction of a coal handling port at Lienyungang.

Containerisation is a general objective, and some containers are to be seen on the dockside at Huangpu (Whampoa), the port of Canton. Building work is in progress there, but the People's Daily said recently that not even the first stage of construction had been completed after five years' work. Besides, Chinese roads and bridges would need total reconstruction before container transport becomes a feasible proposition. A container truck which recently made the journey from Hong Kong to Canton had to cross three rivers by ferry. This is typical of the kind of difficulties that face the leadership in bringing the transport system as a whole up to modern levels, and to iron them all out across the country will take many years.

C.M.

CHINA'S TRANSPORT PRODUCTION

	1977	1978
Motor vehicles (units)	125,400	149,100
Internal combustion engines (m h.p.)	27.41	35.1
Locomotives (units)	293	521
Freight wagons (units)	6,396	16,950
Steel ships (tons)	64,300	865,900

A need to simplify the planning system

EFFICIENCY

CHINA'S INDUSTRIAL system is plagued by inefficiencies at all levels and it will take a good many years of determined and consistent effort to root them out.

The inefficiencies stem in part from excessive bureaucracy outside the enterprise — the numerous and often overlapping levels of authority, central, provincial and local, whose approval is needed for key decisions.

While the Chinese are now trying to simplify the planning and control arrangements, there must be doubts about whether a genuine decentralisation of authority to the managers of individual enterprises — which would imply a greater responsiveness on their part to customer needs — is compatible with the Government's insistence on the need for centralised allocation of resources.

Within the enterprise the planning system as it has operated so far is not conducive to rational management. Because funds for capital investment and to some extent for working capital have been allocated by the state in the form of grants, there has been little incentive to use the money economically or to earn an adequate return on them. Virtually all the profits of the enterprise are handed over to the state.

Disrupted

Enterprises do not in general deal directly with their customers or their suppliers of raw materials and components. These functions are handled by other agencies and corporations whose role as intermediary between buyer and seller seems increasingly burdensome and unnecessary.

The internal management of factories was disrupted by the turmoil associated with the Cultural Revolution and the Gang of Four (1966-76). Party Revolutionary Committees made it impossible for senior managers to exercise authority over the workforce, while the drive for egalitarianism led to the abandonment of personal incentives for higher performance.

Although a more normal management structure has now been restored in most enterprises and bonus systems have been reinstated, it seems that the bad work habits engendered during the 1966-76 period are still widespread; productivity of labour is low.

The Chinese authorities are aware of the need to change institutions and attitudes so that these weaknesses can be overcome. Changes within the enterprise and in the relationship between the enterprise and its supervisory authorities are still being debated, but the direction of reform is clear.

Managers are to be put under greater pressure to perform efficiently and given greater autonomy in running their factories. One aspect of this is the planned move from grants to loans in the financing of capital investment. The idea is that the enterprise which receives a loan for a major project will have to account strictly for its disbursement and will be penalised for over-runs in cost or construction time. This should lead to better planning and a more sparing use of capital.

At the same time there are suggestions that the depreciation rate will be increased and that enterprises will be allowed to retain a larger proportion of their profits. Thus the more profitable companies should be able to grow faster—and provide better salaries and better conditions for their employees.

However, according to a recent article in the Peking Review, the new system does not mean that there will be free competition for capital construction according to the principle of profit. "The state will continue to draw up construction plans and make decisions with regard to the projects to be built in accordance with the socialist principle and in the interests of the people." A balance is being sought between autonomy and local incentives on the one hand and central control on the other.

Within large enterprises there are moves to push profit responsibility down to the operating units, so that the managers and workers in those units are held accountable for their performance and rewarded accordingly.

In the Anshan steelworks, for example, which has over 200,000 employees, each of the production units which sells to outside customers has its own profit targets. The management plans to extend this to plants whose output is used internally and to create new accounting units for maintenance and repair, for component manufacture, for welfare services and so on.

Since the beginning of 1978 Anshan has brought in new bonus schemes. One is a comprehensive bonus for all members of a production unit which fulfils its eight targets. (These targets relate to quantity, quality, variety, labour utilisation, raw material consumption, cost, working capital and profit.) Individual bonuses are also paid to workers who make an outstanding contribution by, say, economising on the use of raw materials.

Targets

A senior manager at Anshan told us that since the introduction of these schemes 49 of the 54 production units had achieved their eight targets, compared with only five out of the 54 in the previous year. The attendance rate had improved by about 20 per cent. "There are fewer patients in the hospital," we were told. Bonuses at Anshan average about 14 per cent of the monthly wage.

Both the principle and the mechanics of the bonus system are still matters of controversy. They have had a divisive effect in some plants and there have been reports of strikes, with workers demanding that the same bonus should be paid to everyone.

The authorities are anxious that too much stress should not be placed on material rewards. —"political education is essential—if we relied solely on bonuses, conflicts would occur," we were told at Ashan.

Apart from appealing to the workers' revolutionary spirit (Communist Party members are expected to abstain from taking their bonuses or at least to take a smaller amount than they are entitled to), there is publicity for outstanding workers on factory notice boards and in newspapers. The official line is: "Adhere to the principle of combining moral encouragement with material rewards, with the emphasis on the former."

At the industry level attempts are being made to achieve economies of scale through rationalisation and specialisation. Partly because factories have been unable to rely on supplies of components, there has been a tendency to integrate backwards in castings, forgings and other items. In some sectors a number of units are being grouped together under one general factory which can allocate work on a logical basis and avoid unnecessary duplication.

At the Shenyang Tractor Factory, which has a capacity of about 20,000 walking tractors a year, we were told of plans to close down some small, uneconomic tractor plants (which had been set up during the Cultural Revolution) and to supply the whole of the North East from one source. The same thing is happening in the fertiliser industry. There are limits to how far rationalisation can be taken on a national basis, in view of transport difficulties, but it is being encouraged on a regional and local level.

As the drive for greater efficiency continues, two doubts persist. One is the possibility of resistance to the introduction of techniques and practices borrowed from the capitalist system. The statement attributed to Deng Xiaoping in the early 1960s—"black cat, white cat, as long as it can catch rats it's a good cat"—was violently attacked during the Cultural Revolution as an endorsement of capitalist methods.

That hostility is certainly not dead, but supporters of Deng argue that some Eastern European countries, such as Yugoslavia and Hungary, have succeeded in introducing elements of the market economy without undermining socialism.

Second, there are vested interests at all levels of the bureaucracy which may prove a powerful obstacle to decentralisation. Even if some streamlining is achieved at the provincial and local levels, big investment and planning matters have to be referred to the centre, where the decision-making process is slow.

Co-ordination between ministries appears to be weak or non-existent and conflicts can be resolved only at the very highest level; hence decisions tend to be deferred or not taken at all. The authorities have been urging enterprises to emulate management techniques used in Japan and the West; but it is in the structure of government that the biggest reforms are needed.

G.O.

A plan to correct the imbalances

STEEL

ANSHAN IN North West China is one of the world's largest steelworks. It produced 6.8m tonnes of steel last year and total employment, including the iron ore mines, is over 200,000, more than the whole of the British Steel Corporation put together. Yet Anshan suffers from all the weaknesses which have made steel a major bottleneck in the Chinese economy. The equipment, most of it designed and built in China, is a mixture of old and new. Among the 54 mills and workshops which make up the iron- and steel-making complex is China's largest blast furnace and two big 150-ton oxygen converters. But much of the plant is inefficient and there are serious imbalances within it.

Although there are extensive local iron ore reserves, there is not enough ore being produced to feed the blast furnaces. The capacity of the rolling mills is too small to absorb the output of the steel-making shops. Productivity of labour is low, partly because of the disruptions caused during the Gang of Four period but partly also because of the difficulty of managing such a huge, sprawling site.

Since it represents more than a fifth of China's steel-making capacity the modernisation of Anshan is vital to the Government's hopes for an efficient industry which can meet the country's steel requirements. At the time of our visit a revised development plan, geared to the three-year period of reappraisal decreed by the authorities, was beginning to take shape.

The emphasis is on correcting imbalances and making the best use of existing facilities. The management is looking for a well-balanced works with a capacity of around 7m tonnes. Some of the open-hearth furnaces will be replaced by a third large oxygen converter.

A continuous casting machine will be installed (this will probably be imported) and there are tentative plans for a new wire mill and a tube mill. The iron ore mines are being expanded; some preliminary talks have been held with United States Steel on this. At the same time the organisation of the works is being simplified, with profit responsibility being devolved to the individual units.

Quality

Plans for an immediate and dramatic expansion of capacity have been deferred. This year's budget calls for an output of 6.7m tonnes, slightly less than last year. "During the period of readjustment," we were told, "our aim is to reduce cost and improve quality."

The ambitious project to construct a new integrated works north-west of the present site, with an ultimate capacity of 8m tonnes a year, is still on the table and some preliminary work has been done on it, but it is unlikely to go ahead until the problems of the existing works have been sorted out.

The priorities are much the same at the Shoudu steelworks in Peking. Shoudu has four blast furnaces which produced 2.1m tonnes of iron last year. It has a basic oxygen steel-making shop with three 30-tonne converters (designed and made in China) which made 1.2m tonnes of steel last year. It has a bar and rod mill which makes 300,000 tonnes a year of finished products. The plan is to modify and expand the works to create a balanced capacity of 3m tonnes a year.

Davy and British Steel Corporation prepared a joint study on the modernisation and expansion of Shoudu. Davy has been negotiating for the supply of a new blast furnace and merchant mill, to be followed later by a basic oxygen furnace, a continuous caster and a hot strip mill. Although no contracts have yet been signed, there are strong hopes that the business will come to the UK, especially as the Davy/BSC proposals contribute directly to the objective of upgrading the quality of steel produced at Shoudu. Davy would supply the hardware, and BSC the technical services, training and assistance with commissioning and operating the new plant.

The Chinese badly need more steelmaking capacity —last year they imported over 8m tonnes, mostly from Japan—and yet their existing plants have been operating well below capacity, through equipment deficiencies, lack of power or for other reasons.

The outstanding case of bad planning is the Wuhan works in central China: nearly $500m-worth of Japanese and German equipment has been installed but the start-up has been delayed because sufficient power is not available.

The equipment for the Wuhan expansion, ordered in 1974, included a hot strip mill and other plant from a Japanese group led by Nippon Steel, while Demag and other German companies supplied a continuous caster, a cold mill and a galvanising line. The Ministry of Metallurgical Industry is studying several alternatives for supplying power to Wuhan, including a gas turbine power station on which several foreign companies have submitted offers.

With so much valuable plant under-utilised there is a reluctance to launch into massive new projects Since the heady days of early 1978, when a target of 60m tonnes of capacity by 1985 was proclaimed, steel has been moved down the list of priorities. As the Minister, Tang Ke, said to us in Peking: "We have got to be realistic." The immediate need, he stressed, was to improve productivity.

How the reappraisal will affect the size and timing of investment in steel is far from clear. After some months of re-negotiation the new Baoshan steelworks outside Shanghai, to be built by Nippon Steel, is now going ahead. This is the biggest single project within the China-Japan trade agreement. It will have a capacity of 6m tonnes a year to be reached in two stages, and is designed to supply the engineering industries of Shanghai, which at present are seriously short of iron and steel.

Complaints

The plan for another new works, at Ji Dong in Hebei province, which was to have a capacity of 10m tonnes or more, appears to have been deferred. This was the project for which a German consortium including Schloemann-Siemag, GHH-Sterkrade, MAN, Siemens and Thyssen had high hopes. With an estimated cost of DM28bn, the Ji Dong works was to have four blast furnaces, each with a capacity of 10,000 tonnes per day, and two oxygent steelmaking shops with seven 330-tonne converters, as well as a heavy plate mill, a hot strip mill and a cold rolling mill. Officials at the Ministry of Metallurgical Industry indicate that the project will go ahead, but on a time-scale yet to be determined.

Yet if the more ambitious projects have been deferred or scaled down, the Chinese still will be spending large sums on their steel industry and some of it seems certain to involve foreign equipment. In the case of Shoudu, for instance, there is apparently a desire to order British equipment, but there are the familiar complaints that the prices are too high and an insistence that the imported equipment must be paid for by exports of steel from the plant. Both the manager at Shoudou and Minister Tang Ke were emphatic that the Davy and British Steel Corporation, if they wanted the business, would have to help China sell steel in export markets.

Attempts are being made to convince Peking that it makes little sense to sell Chinese-made steel on an over-supplied world market, especially when China needs all the steel she can make for her own consumption. If China insists on compensation trade, which Davy and BSC are quite prepared to consider, it would be more logical to make use of the non-ferrous metals and special qualities of coking coal which BSC has to import from somewhere and which are available in China—or could be made available by the time the steel-making equipment is shipped.

In the meantime there are other problems which have to be solved. One is the need to improve the supply and quality of iron ore and coking coal. Although there are large reserves of both these materials, much of the iron ore is of low grade and there has been inadequate investment in benefication. Kaiser Engineers and Bethlehem Steel of the U.S. are carrying out engineering studies on two projected iron or mines in Hebei province.

Another problem is the lack of capacity for alloy steels. Discussions have been held with the Japanese and with the UK over plans for upgrading some of China's existing special steel plants and for building new ones. Minister Tang Ke made it clear to us that this sector remained a high priority and that there certainly would be business for foreign companies. More concrete negotiations are expected to be resumed in the next few months.

G.O.

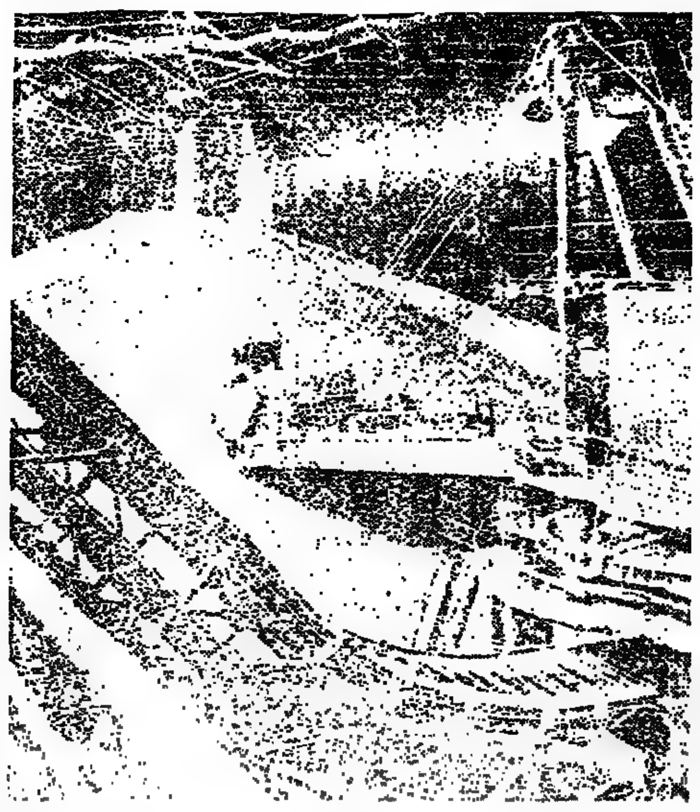
MAJOR STEELWORKS

Location	Estimated capacity (m tons)
Anshan (Liaoning)	7.0
Benxi (Liaoning)	1.0
Shoudu (Peking)	1.3
Taiyuan (Shanxi)	1.0
Baotou (Inner Mongolia)	1.0
Wuhan (Hubei)	3.0
Shanghai	4.0

CRUDE STEEL PRODUCTION (million tons)

1965	12.5
1970	17.8
1975	25.0
1976	22.0
1977	23.7
1978	31.8
1979 (planned)	32.0

Note: estimated figures for 1965-76, official figures for 1977-79.



A fertiliser store at a Japanese-built chemical plant in Sichuan

Huge orders for plant

CHEMICALS

AT LIAOYANG, 30 miles south of Shenyang in the north-western part of China, some 40,000 Chinese and about 130 foreigners (mainly French) are working to complete one of the country's largest petrochemical complexes. The project is running late, partly because of its size, partly because of design changes and partly, we were told, because of disruption caused by the Gang of Four.

The contract was placed in September 1973 with a group of French companies led by Technip and Speichim and the complex was due to be in operation last year; commissioning is now expected to be completed by the end of 1980.

The complex includes a catalytic reformer, steam cracker and all the intermediate chemicals for nylon and polyester fibre; the plant is the responsibility of the Ministry of Textile Industry.

In addition to the French companies, which include Rhone-Poulenc, F. Uhde, of Germany has built a high-density polyethylene plant and Snam Progetti of Italy a polypropylene plant; both these are completed, awaiting supplies of ethylene and propylene. Virtually all the equipment is imported except for the polyester spinning line and two of the three nylon spinning lines. There are tentative plans for producing polypropylene fibre at a later stage.

The complex has been built on a green-field site, and construction involves the familiar Chinese mixture of ox-carts and modern earthmoving equipment, mostly imported from Japan. As at the Peking petrochemical works, a large satellite town has been created, with its own hospital, schools and department stores. About 300 Chinese were sent to Europe for training. The number of foreigners on the site is expected to reach a peak of about 300 next spring, when commissioning is due to start. If all goes well, they should all have left by the end of the year.

The Liaoyang contract was part of the big wave of orders for petrochemical, synthetic fibre and fertiliser plants placed in the 1972-75 period. Other big fibre plants have been built at Shanghai, which has already been commissioned, and at Tianjin, still under construction; most of the equipment for these two sites was purchased from Japan and West Germany.

On the fertiliser side by far the largest contract went to Pullman Kellogg, with eight ammonia and eight urea plants; the latter were handled by Kellogg's Dutch subsidiary. The UK's share of contracts during this period was small; Humphreys and Glasgow supplied a methanol plant which forms part of a complex being built by Speichim.

Another wave of ordering began in 1977 and reached a peak towards the end of last year. Again the emphasis is on using China's heavy crude oil as the basis for producing materials needed in agriculture, textiles and light industry. Two of the biggest orders were for aromatics complexes to be built at Shanghai and Nanjing by Lurgi; the latter is associated with the world's biggest polyester polycondensation plant, built by another German company, Zimmer, which is a Davy subsidiary.

Lurgi also won a significant order for a coal gasification plant, to produce ammonia, in Peking; this technology may be used in parts of the country which have coal resources but cannot economically be supplied with oil. All the Lurgi contracts are on the basis of cash payment.

Among British orders are Davy's contracts for two oxo-alcohol plants and a synthesis gas plant and a CJB contract for high-density polyethylene. Pullman Kellogg has won some further business, but the lion's share has again gone to German and Japanese companies.

The Chinese now have a huge construction programme which may strain their management and engineering resources, but foreign contractors believe China now has sufficient experience of building and operating similar plants to carry through the programme successfully.

G.O.

Borrowing ideas from abroad

FOREIGN TECHNOLOGY

AT THE No. 13 radio factory in Shanghai a 1,100-strong workforce, including 300 engineers and technicians, is turning out about 100 computers a year. These are Chinese-designed computers, belonging to two families, the DJS series and the TQ series, some models of which are also manufactured in Peking and other cities. The Shanghai factory, specialising in computers since 1966, is under the direct control of the Shanghai Electronic Computer Corporation, which in turn reports to the Shanghai Bureau of Meters and Instruments. General supervision of the electronics industry is exercised by the Fourth Ministry of Machine Building in Peking, but as in most other sectors centralised planning is tempered by a considerable amount of local initiative. Important users or potential users of computers, like the Daqing Oil Field, play a big part in the development of both hardware and software.

Much of the production work at the Shanghai factory is carried out by hand. The senior managers frankly admit that they are many years behind the West in computer design and in manufacturing techniques. The quality of the integrated circuits appears to be patchy and the engineers are eager to move to large-scale integration as developed in the U.S. and Japan.

Familiar

None of the managers to whom we spoke had visited computer companies outside China, but they received the technical magazines and were familiar with what was going on. A few foreign-built computers have been imported in recent years (mainly from Japan), and the Chinese engineers are learning what they can from them. But this is not a substitute for the direct foreign collaboration which the Shanghai managers now recognise is essential. Some discussions with potential partners have already taken place.

It was a similar story at the Shanghai Turbine plant. Built in the 1950s with Czech technical assistance, this factory is now making 50 MW, 125 MW and 300 MW sets. The senior managers admit that there are still some design problems with these machines; the period between major overhauls, for example, is much shorter with the imported turbine generator sets than with the Chinese machines. The plan is to move towards 600 MW sets during the next five years, and a large new factory is under construction for this purpose. But it is accepted that for the move into the 600 MW era some foreign collaboration is essential. Preliminary talks have been held with General Electric of the U.S., and with the French.

The need for foreign technology is clear, but how much of it will be bought, in which sectors and in what form—these matters are still under discussion. Certainly the Chinese are not going to make themselves as dependent on outside technological help as they did during the 1950s, when the Soviet Union provided assistance on a massive scale. China will use foreign technology only when it is necessary to do so. Foreign companies will not be allowed to exercise direct influence over any significant part of the economy. Their participation will normally be that of adviser, although the distinction between technical advice and management control may be blurred in some cases.

Since the withdrawal of the Soviet technicians in 1960 China's attitude towards foreign technology has fluctuated according to the prevailing ideological climate. The use of foreign technology has been one of the issues in the apparently unending "struggle between two lines," pitting "red" against "expert," "radicals" against "pragmatists," ideological purity against industrial and managerial efficiency. In the early 1960s, after the failure of the Great Leap Forward, there was a big increase in purchases of foreign plant and technology—and again in 1972-75 after the Cultural Revolution. With the rise of the so-called Gang of Four the emphasis switched to home-grown technology and hostility to all things foreign.

The present regime is trying to formulate a realistic approach to foreign technology which does not conflict too violently with Maoist ideas. "Self-reliance is the main principle," Vice-Premier Gu Mu told us. "the importation of advanced technology and equipment should be regarded as auxiliary. We can solve most of our problems by relying on the initiative and effort of our workers, engineers and managers. In importing new technology we will encourage our engineers to assimilate and learn modern techniques—that will contribute to our policy of indpendence and self-reliance."

The desire to assimilate is most evident in the large numbers of Chinese who flock to foreign technical exhibitions such as the British Energy Exhibition which was held in Peking in June. These are accompanied by technical seminars given by the participating companies. It is not uncommon for a lecture to be followed by questions lasting the best part of two days. But there are obvious limits to how much can be learned by this method.

Feasible

The same applies to another technique which the Chinese have used—the copying of imported machines; the Massey-Ferguson 35 horsepower tractor was one early example. To reproduce an imported machine may be feasible, but to make it on a large scale and to match the quality, reliability and cost of the foreign manufacturer is a very different matter. China lacks some of the equipment and materials (such as alloy steels) which are available to the foreign company. More important, there is a long-standing weakness in design. Unlike the Japanese, the Chinese have not been able to copy foreign machines and then move on to develop new products, incorporating design innovations of their own. China's ability to absorb foreign technology is limited by the lack of a design tradition and by the shortage of qualified designers, made worse by the disruption of the education system between 1966 and 1976.

"What the Chinese lack," writes Hans Heymann, an American observer, "is not the ability to manufacture. They manage quite well with custom-building, hand-machining and small-scale batch production. What they have not mastered are the techniques of modern continuous-flow production processes, precise automation technology and other organisational aspects of management."

In this context the importation of complete plants, particularly for petrochemicals, fertilisers and synthetic fibres, should have an important educational effect. Although the construction of some of these plants has been delayed, enough of them are in operation to show that the Chinese are capable of running complex advanced-technology projects. But the danger is that thes plants, most of which were buil on green-field sites (sometime in remote areas), will becom islands of modernity withou much spin-off effect on the res of industry. Virtually all th hardware for the Kellogg am monia and urea plants, for ex ample, was imported; th Chinese appear to be cautiou about using indigenous equip ment in these projects, presum ably for fear of causing techni cal problems which will dela their completion.

If the Chinese are t modernise their industrial bas without excessive dependenc on overseas companies, the will need to use foreig collaboration in a variety o different ways. For example the manufacture of petrol an diesel engines is spread over number of plants and model with outdated designs and poo economies of scale both i engine assembly and in com ponent production. Th modernisation of the far machinery industry is a hig priority and there is an urgen need for more efficient diese engines.

The British engineering con sultants, Ricardo, are advisin the Chinese on specific design and on overall engine policy China is also likely to seek assist ance from foreign engine an component manufacturers. Thi may involve licence deals, th purchase of equipment and com plete plants and possibly join ventures, particularly if the permit imported technology t be paid for by exports.

In some respects the agree ment with Rolls-Royce on th Spey engine is a model whic the Chinese may seek to use i other sectors — establishing partnership with a foreign com pany which is an acknowledge leader in its field, drawing on it technology and advice to updat existing designs and manufactur ing facilities. For the foreign company the drawback to thi arrangement is that it is usuall more interested in selling hard ware than in transferring tech nology. For the Chinese the problem is the lack of qualified engineers capable of absorbin the new technology. Trainin provided by the foreign com pany is a partial answer, but i the long run the diffusion o modern technology will requir a great improvement in th quality and quantity o scientific education, especiall in the universities and at th post-graduate level.

G.O

A confusion of responsibility

MANAGEMENT

CHINESE MANAGERS, like university professors and others holding senior positions, suffered badly during the period of the Cultural Revolution and the Gang of Four. They were largely deprived of their authority and in some cases relegated to the shop floor. Power was in the hands of Revolutionary Committees which were more interested in ideological purity than in running an efficient enterprise. Since the fall of the Gang the role of the manager has been re-established. Senior executives, though still contending with great obstacles and frustrated because of them, have recovered some of their self-confidence as well as their authority. Most of the managers to whom we spoke during our visit showed as much enthusiasm and determination to improve profits, productivity and quality as their Western counterparts. The question is whether the Chinese system will allow them to do so.

In most enterprises the dual structure which prevailed before the Cultural Revolution has been restored. On one side is the factory's Communist Party committee, whose secretary is regarded as the most important man in the plant. The Party secretary is responsible for representing the Party's policies and objectives to the enterprise and for ensuring that they are understood at all levels and carried out. He is sometimes said to be responsible for political education, but at the same time he participates in major investment and technical decisions.

All important decisions—for instance on the figures to be included in the annual plan, proposals for the purchase of new capital equipment, the installation of a new incentive scheme—have to be approved by the Party committee, which meets at least once a month. The director of the enterprise, who will normally be a member of the Party committee and is sometimes its deputy secretary, is responsible for the day-to-day operation of the plant. He and his deputies will meet at least once a week to review the progress of the factory. His deputies may be in charge of particular manufacturing departments or have functional responsibilities, for production, quality control, finance, personnel and so on.

The relationship between the Party secretary and the director is clearly crucial. In some respects their roles appear to be not unlike that of the chairman and managing director in a conventional UK board of directors. One of the tasks of the Party secretary is to look after liaison with external bodies—for example, with the various planning authorities with which the enterprise has to negotiate. (In the Anshan steelworks the Party secretary is also a vice-minister in the Ministry of Metallurgical Industry.)

Discretion

Managers will say "we practise collective leadership," and the extent of the director's discretion must vary from enterprise to enterprise. In the Shanghai Leather Shoe factory, which has about 900 employees, the nine-member Party committee considers the big issues like the appointment of department heads and next year's production plan. The Party secretary, apart from his activities outside the company, spends a good part of the day talking to workers at different levels, listening to their suggestions and complaints and generally concerning himself with the welfare and morale of the staff. He is in regular contact with the director (one has an upstairs office, the other downstairs), but does not interfere in day-to-day management.

The Party committee contains some shopfloor workers, but the workers' congress is said to be the main vehicle through which employees influence the management of the enterprise. Some sort of balance appears to be struck between the Party committee and the workers' congress. "If we relied too much on the Party committee," we were told at the Shanghai Turbine plant, "the initiative of the broad mass of workers would not be brought into play. If we relied too much on the workers' congress, there would be a danger of anarchy."

A recent article in the Workers' Daily called for more enterprises to establish workers' congresses. "The leadership (of the enterprise) must inform the workers' congresses about the finances and planning of the enterprise as well as about difficulties and problems, and should ask them for criticism and suggestions." The article notes that in some enterprises workshop directors, section chiefs and group leaders have been elected by the workers, and this has brought about closer relations between enterprise management and workers. There have been recommendations that direct election by workers should be applied to the senior directors, but this had not happened in any of the enterprises we visited.

Foreign companies operating in China argue that the Chinese management system leads to a confusion of responsibilities and a lack of a clear-cut chain of command. "There is too much scope for group discussion and not enough direction by senior managers." The Chinese authorities appears to acept this criticism. In line with the more welcoming approach to foreig technology there is a realisatio that adoption of foreign manage ment methods is essential if th best use is to be made of im ported plant. Visitors from ove seas have told Chinese official that output in some plants coul be increased by as much as 5 per cent through a clearer an more rational allocation of re ponsibilities. An Association c Enterprise Management was se up in Peking earlier this year t study management systems an experience in China and abroa

How far these developmen will enhance the status of th professional manager remains t be seen. Most of the managers t whom we spoke were hopeful.

Frustrating

It was, of course, frustratin for the managers at the Shoud steelworks in Peking not to b able to buy even minor items c capital equipment without th lengthy process of filling u forms and arguing their cas with officials at the Ministry. was frustrating to be earnin foreign exchange throug exports, but not to be able to us a cent of it to buy imported equipment, even items tha would cost very little but woul have a useful impact on produ tion efficiency.

It was frustrating, too, not t have direct dealings with th plant's foreign customers and t discuss market conditions wit them, so that they could see th strength of the competition an have a better appreciation c market needs.

It is often said that th modernisation of Chinese i dustry is primarily a matter c management. But this is not ju a question of acquiring specia ised skills from overseas. involves giving the managers c individual enterprises the statu authority and incentive to tak independent decisions.

G.O

West is exploring offshore waters

OIL

ENERGY, THE Chinese say, is a priority sector. But within that sector it is offshore oil exploration that is getting he greatest priority.

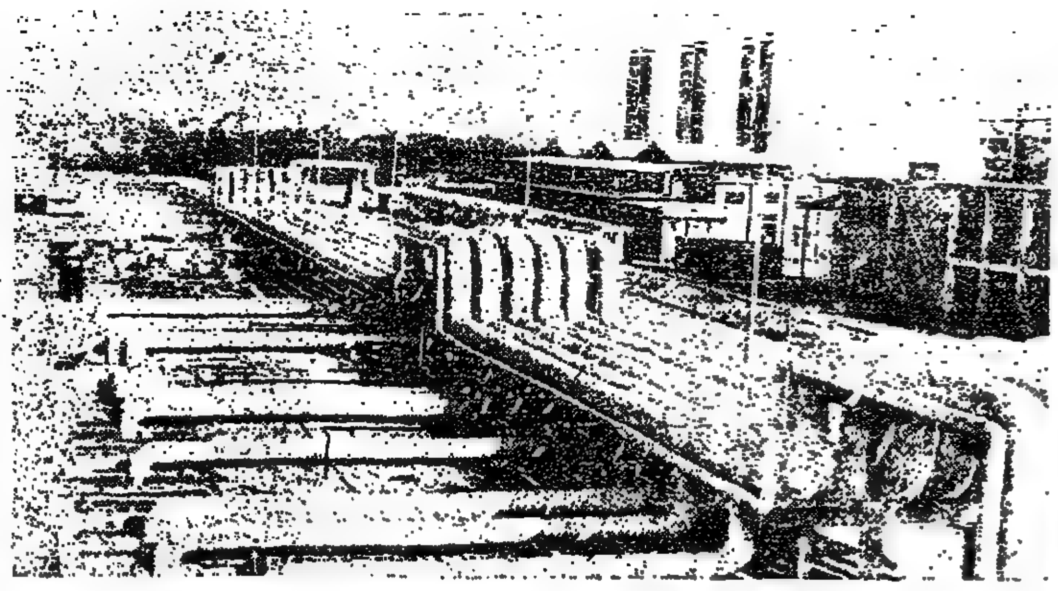
Western oil companies are now carrying out seismic surveys in about eight concession areas spread across the Yellow Sea and the South China Sea.

Agreements with Atlantic Richfield and British Petroleum were rapidly followed in the first half of the year by contracts for seismic exploration with other western companies. The companies expect to hand over the seismic data and their interpretation of the findings by the end of March 1980.

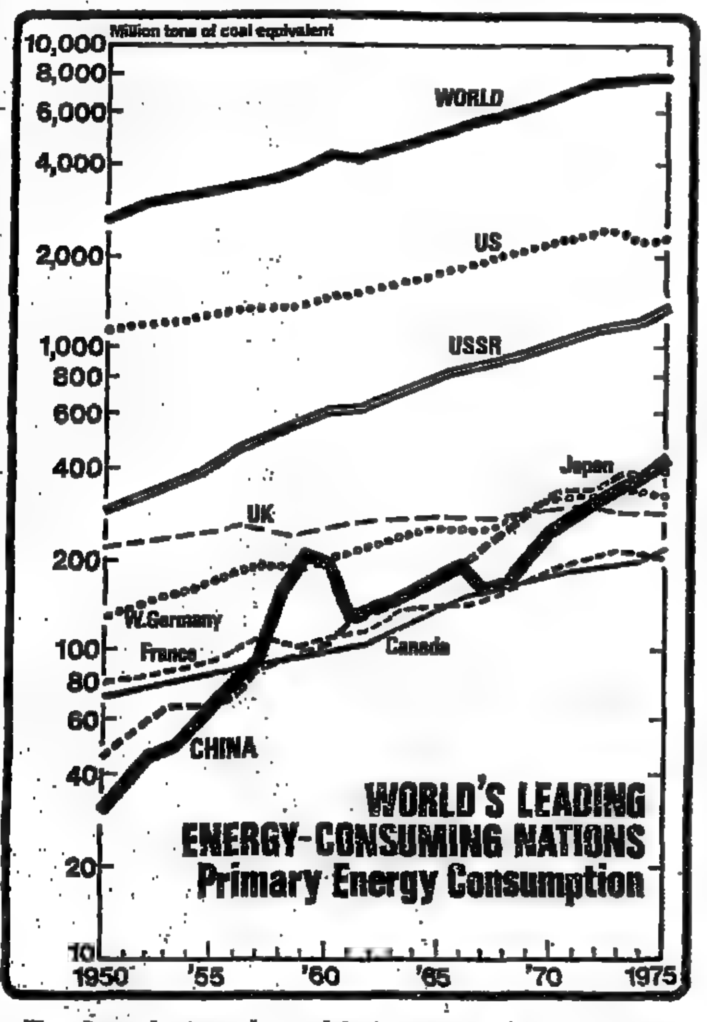
Peking is working on a new law setting out the terms under which foreign companies can explore and develop. The industry hopes that this will be ready this winter. If it is, and the Chinese are happy with the interpretation of the seismic data, then they could denominate offshore blocs and open them up to international bidding by next summer.

This would mean that exploratory drilling could get underway by late summer. More likely the Chinese will want more time to make the necessary complicated assessments and drilling will begin in 1981. Western companies believe the Chinese will opt for some form of production sharing contract.

China's decision to open up its offshore waters has created a tangible patter of excitement among western oil companies as the China coast is one of the few promising offshore areas in the world that has not been explored. On the Chinese side, the sharp break with past ideological hostility to involving western companies in resource development reflects Peking's belief that the potential of larger oil exports offers the greatest promise of a sharp increase in foreign exchange earnings. Indeed, it seems likely that the Government will continue to postpone decisions on the scale of capital equipment imports in the coming years until it has a better idea of what its oil resources—and hence its borrowing capabilities—will be.



A pumping station on the Linyi Nanking oil pipeline at Yicheng in Kiangsu province



The above chart can be read in two ways: (a) as a measure of the political instability in China since 1952 as compared with that of major powers or (b) as an illustration of China's growing importance as a consumer of primary energy.

Vaclav Smil, from whose essay "China's Energetics: a Systematic Analysis," it is reproduced, uses it to make the second point. He says, however, that Russia and the U.S. were the only two countries in 1975 to have surpassed primary energy production of 500m tonnes of coal equivalent (mtce). Both found that beyond that level the problems of further expansion slowed down the rate of growth. China's primary energy production has now passed 500 mtce. Beyond 500mtce, Russian primary energy production grew at 6.7 per cent a year. "Chinese Economy Post-Mao: Joint Economic Committee Congress of the United States."

Evidence

The CIA's 1977 estimate*—based on scanty evidence—is that offshore reserves are likely to be of about the same magnitude as onshore reserves or roughly 39bn barrels. This would mean total reserves of about 78bn barrels. Until China decided this year to seek western help, there has been no systematic survey of the offshore waters. China's own seismic surveys have been unmethodic and of only moderate quality by western standards. The Chinese are now anxious that their own personnel get training on the equipment being used by western companies.

They are also buying more western oil technology themselves. Between October, 1976, and December, 1978, they spent about \$500m on imports to develop their oil and gas reserves. This has included at least three survey vessels, six jack-up drilling rigs, six helicopters for supplying rigs and six supply vessels. Offshore purchases have been mainly from Norway, Japan, the U.S., Singapore and France.

British Petroleum and Elf Acquitaine are surveying adjacent areas in the Yellow Sea. The agreement with BP—which is operator for a group of 16 companies—was signed in February and was initially estimated to involve seismic work costing \$6m with no guarantee that any of the partners will be able to undertake drilling work. By late June five transmission and monitoring stations on the Chinese coast needed for positioning survey vessels had almost been erected—in spite of Chinese hesitation at foreigners working on a sensitive part of their coast and even stronger dislike of the continuous shore-to-ship radio traffic involved.

Exxon, Mobil, Caltex and Phillips are operators for four areas in the South China Sea. Atlantic Richfield has an exclusive survey programme south of Hainan island and Amoco is the operating company in a survey to the west.

All the participating companies are in effect working without charge—almost unprecedented in the oil industry—in the expectation that they will stand a better chance of securings blocks for further exploration and development when the Chinese put them on offer. BP has been told that their area adjoins an onshore structure in which the Chinese have found a commercially viable oilfield.

With a maximum water depth, for instance, in the area BP is surveying of 220 feet, the time lag between discovering a field and bringing it on stream could be as little as 1½-2 years. That means that oil from the Yellow Sea or the South China Sea could be flowing by mid 1982. But the Chinese have still to make up their minds on the terms of an exploration and development law. Also they have to decide on the pace at which exploration is to proceed. What the industry fears is that they will let off a great number of blocs at the same time, causing a rush on rigs which would greatly increase the cost of exploration and development as happened in the North Sea.

The possibility of long delays has been strengthened by the Japanese experience in the Gulf of Bohai. Having reached an initial agreement with the Chinese to appraise and develop known deposits in the shallow waters of the Gulf, further negotiations ran into deadlock. Disagreements arose over the financing of the venture and the interest rates on Japanese loans.

The quantities of oil that China will have available for export in the 1980s will depend not only on the success of the offshore programme but also on the pace of onshore development and the strength of domestic demand.

The CIA summed up its 1977 study saying: "On balance we believe that China will produce 2.4-2.8m barrels a day by 1980. Most of this oil will be needed for domestic consumption: exports are likely to be only 200,000-600,000 b/d. Within a decade or so, continuously expanding domestic demand will absorb total capacity unless deposits in the west or offshore are proved and exploited much more rapidly than expected."

Difficulties

In 1978 China produced 2.08m b/d, which was 11 per cent higher than in 1977. But the rate of increase in production last year is well below the 20-25 per cent a year that China achieved in the decade 1965-75 as a result of heavy investment in oil at the expense of coal. Oil output was up only 3.6 per cent in the first six months of 1979 as against the same period for 1978. This slowdown in the rate of growth would seem to reflect difficulties that the Chinese have run into exploiting their existing fields as well as some attempt to slow down the pace of domestic consumption. The main technical difficulties are believed to be setbacks in secondary recovery through water injection in the major Daqing field and the obsolescence of much of China's exploration, production and refining equipment.

In 1975, nearly 80 per cent of China's production came from three fields in the north and north-east — Daqing, Shengli and Dakang, all developed with Russian designed equipment—with Daqing alone accounting for 54 per cent of output and 85-90 per cent of crude oil exports. Most of the oil from this area is a heavy waxy crude that needs catalytic cracking, for which few refineries outside China are equipped.

Chairman Hua in the plan he announced to the National People's Congress in 1978 declared that China must develop another 10 major oilfields comparable to Daqing by the end of the century, which implied a production goal of 10m b/d by the year 2000. The goal of another 10 Daqings has been tacitly dropped.

Peking has since claimed to have discovered a major new oilfield in western Xinjiang on the edge of the Tarim basin, and there have been some reports of China's shifting much of its onshore development to the west. The snag is that the cost of piping oil from the west to the industry of the east would be prohibitive. China has also announced discoveries in the Gulf of Tonking, hinted that it has made finds near Shanghai and claimed sizeable deposits in the Gulf of Bohai. But at present rates of production and development it would seem that the CIA's estimate of 2.4-2.8m b/d production by 1980 is too optimistic. On the other hand the prospects for higher rates of production in the mid and late 1980s through the faster development of offshore fields have sharply improved.

Domestic consumption in 1978 amounted to 1.7m b/d, which was 3.3 per cent up on the previous year but well down on the average 9.5 per cent annual increase for the years 1973-78. The slower rate of increase last year came at a time when industrial growth was running at the high level of over 13 per cent. This would suggest that the Chinese are making strong efforts to check domestic oil consumption and increase exports, mainly by substituting coal for oil-fired power stations. There is still plenty of room for this. Oil as a proportion of primary energy produced in China rose from 3 per cent in 1952 to 20 per cent in 1977, reflecting in part China's heavy investment in oil-fired power stations. But domestic demand for oil can nonetheless be expected in future to grow more sharply than last year as industrial growth again picks up momentum, road transport expands and there is increased mechanisation in the countryside. China could easily be consuming 2.5m b/d by 1985.

China's net oil exports, both crude and products, for 1978 amounted to 380,000 b/d, compared with 280,000 b/d in 1975. In 1977 China earned \$1bn from oil or the equivalent to 13 per cent of export earnings.

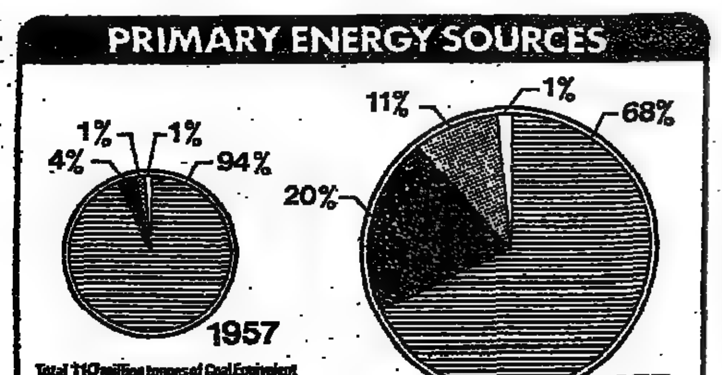
The Chinese have consistently moved their prices in line with OPEC's. The bulk of their oil has been sold to Japan, with smaller deliveries also to Hong Kong, Thailand and Singapore.

The long-term trade agreement with Japan calls for deliveries of crude of 150,000 b/d this year, rising to 300,000 b/d by 1982. The Chinese have also made a deal with Brazil that provides for exports of 20,000 b/d this year, rising to 30,000 b/d in 1980, in exchange for pig iron. A small contract has also been made with the U.S., and China continues to look to sales to Hong Kong and South East Asia.

In the next few years China is unlikely to expand its oil exports significantly beyond the relatively small quantities now available given the constraints on increasing domestic production matched by the rising pace of domestic demand. Hopes for substantial exports of oil by the mid 1980s are pinned entirely on the uncertainties of what the international companies discover offshore. At this early stage the prospects there are described by one expert in the oil industry as "moderately encouraging." The strength of the interest in the oil industry in the area suggests that this estimate may be unduly cautious.

**China Oil Production Prospects CIA 1977.*

D.W.



Kingpin of future power plans

COAL

COAL WAS king in China last year. Xiao Han, the Minister for Coal, announced plans for the doubling of output by 1987 to 1bn tonnes a year. Orders for mining equipment amounted to $1bn. A $4bn protocol was signed with Germany for building and equipping five new deep mines and two open-cast mines. Britain was also led to believe that the Chinese had in store for it orders worth several hundred million dollars to develop new mines.

All this was a much needed recognition that without major new investment in coal, China would not be able to solve its problems of power shortage. But as with steel, China's ambitions well outstripped its capabilities. Most of the mining ventures involving foreign participation have for the moment been put into limbo as the Government re-assesses what mines it wants to develop and what foreign exchange it has to spare for mining equipment.

Indications are that there will be a clearer picture of the level of future investment in coal in the autumn. That would fit in nicely with Chairman Hua's visit to Europe. But even then it is more likely that the Chinese will set in motion a round of new negotiations rather than enter into major new contracts.

China's massive coal reserves are matched only by those of the Soviet Union and the U.S. Between 1960 and 1975, however, output grew at less than 3 per cent a year—a pace woefully inadequate for China's rate of industrial growth even though smaller budgets for coal were offset by higher investment in oil. Output picked up in the early 1970s when renewed emphasis on coal was also reflected in the purchase of $100m to $200m of foreign mining equipment in 1973-74. But the industry was badly hit by strikes and slowdowns during the political chaos of 1976 and also suffered a major loss of output the same year as a result of the Tangshan earthquake.

Production climbed by 12 per cent both in 1977 and last year to 618m tonnes but now seems to have peaked. The extensive half-yearly production figures for January-June 1979 released by the authorities surprisingly did not include coal—an omission that suggests a poor performance. The annual plan for the year foreshadowed only a 3.5 per cent increase in output. Such a slowdown would seem to reflect the exhaustion of the immediate opportunities for boosting production. It could also reflect the phasing out of small mines and an attempt to upgrade the quality of much of the poor coal and coke mined at the larger pits. A slower rate of growth would also relieve some of the congestion on the rail network where coal accounts for a hefty proportion of the freight traffic.

But in the long run the Chinese are looking to a substantial increase in output with a view both to switching more power stations to coal firing—and thus to freeing oil for exports—to increasing exports of coal and to meeting industry's growing demands.

Targets

The targets set by the Coal Minister (and effectively backed by Chairman Hua, who called for the development of 8 new coal bases in his list of 120 major capital projects) were clearly beyond China's capacity. It is not clear, however, how far before December last year, when the overall retrenchment in the economy was begun, that the Chinese realised the muddle they were in. The Coal Ministry certainly got carried away by its own enthusiasm, as reflected in the number of delegations it sent abroad and received and the number of protocol agreements it signed for vast mining projects.

On the other hand it skilfully and not a little unscrupulously exploited the enthusiasm it aroused abroad to enlist the help of Western and Japanese companies to demonstrate equipment and provide consultancy services for which it normally would have had to pay. Comparing notes after the slow-down had become clear, British, German and Japanese companies often found that the Chinese had proposed to them the same mining project and that they were effectively being asked to pass judgment on each other's schemes.

In Britain's case enthusiasm was aroused during the visit to Peking of the industrial delegation led by Mr. Edmund Dell, the then Secretary of State for Trade, in August last year. The Chinese indicated that they wanted Britain to design, construct and equip two large mines of 5m tonnes each at Datong in northern China. In discussions they also implied that they were interested in British participation in the development of several other large mines which would have involved equipment orders running into hundreds of millions of pounds.

As delegations passed to and fro between London and Peking, they also added a coal analysis laboratory in Shanxi province, a testing laboratory for equipment and consultancy over methane drainage. In November the National Coal Board signed a memorandum of understanding with the Chinese for preplanning and feasibility study at Datong, which would have been carried out by PD-NCB, the Board's consultancy division jointly owned with Powell Duffryn, and which also spelt out China's interest in securing British involvement in other projects.

Before the visit of Mr. Varley, the then Secretary of State for Industry, to Peking in February, the Chinese began to shift their ground by adding demands that purchases of equipment should be paid for in part by coal to the shipped to Britain. In the spring, after the NCB had done a great deal of preparatory work, the Chinese announced that they could not receive a further negotiating delegation from the NCB until the revision of the national plan had been completed. Indications now are that the Chinese are likely to set a date for the resumption of talks in the autumn.

The Germans had a similar experience and one that followed longer negotiations. The proposal would have involved German participation in adding 62m tonnes of capacity through five deep mines and two opencast lignite mines in Hubei and Anhui province. Among the German groups involved were Krupp, Orenstein and Koppel, Demag and Thyssen Industrie-Bergbautechnik.

Little has emerged as yet of China's revised long-term planning for the coal industry. The focus will almost certainly remain the opening up of new mines and the enlargement and mechanisation of existing major coalfields. No substantial new coalfields have been initiated since Soviet advisers quit the country in the early 1960s.

But the Chinese want to review the siting of their new mines so as to tie some to new mine-mouth thermal power stations and others to the expansion of their rail network. They are anxious to minimise their foreign exchange expenditures by doing as much as possible of the planning work themselves and by making use of Chinese manufactured mining equipment.

The coal equipment manufacturing industry has had low priority in the past, however, and it is in any case likely to be overstretched in both absorbing new technology and speeding up the mechanisation of existing mines. The Chinese also want to finance their mining imports through cheap credits and compensation trade.

Germany took a 21,000 tonne shipment of coal from China in January which seemed the prelude to further purchases. The long-term trade agreement with Japan provides for deliveries of up to 5.3m tonnes of coking coal and 3.9m tonnes of ordinary coal over the next five years. Britain has told the Chinese that it will not import coal from China but that it is prepared to help China improve its overseas marketing operations. The main snag to financing capital equipment purchases through exports of coal is that China does not have much to spare beyond existing commitments and anticipated domestic demand.

When a British company interested in the possibility of compensation trade through exports of coal to a third market recently pressed the Chinese on available supplies for delivery in 1980-81 it was told that none could be promised. Exports for coal, almost entirely to Japan, amounted to only $95m in both 1976 and 1977, or 1 per cent of China's exports.

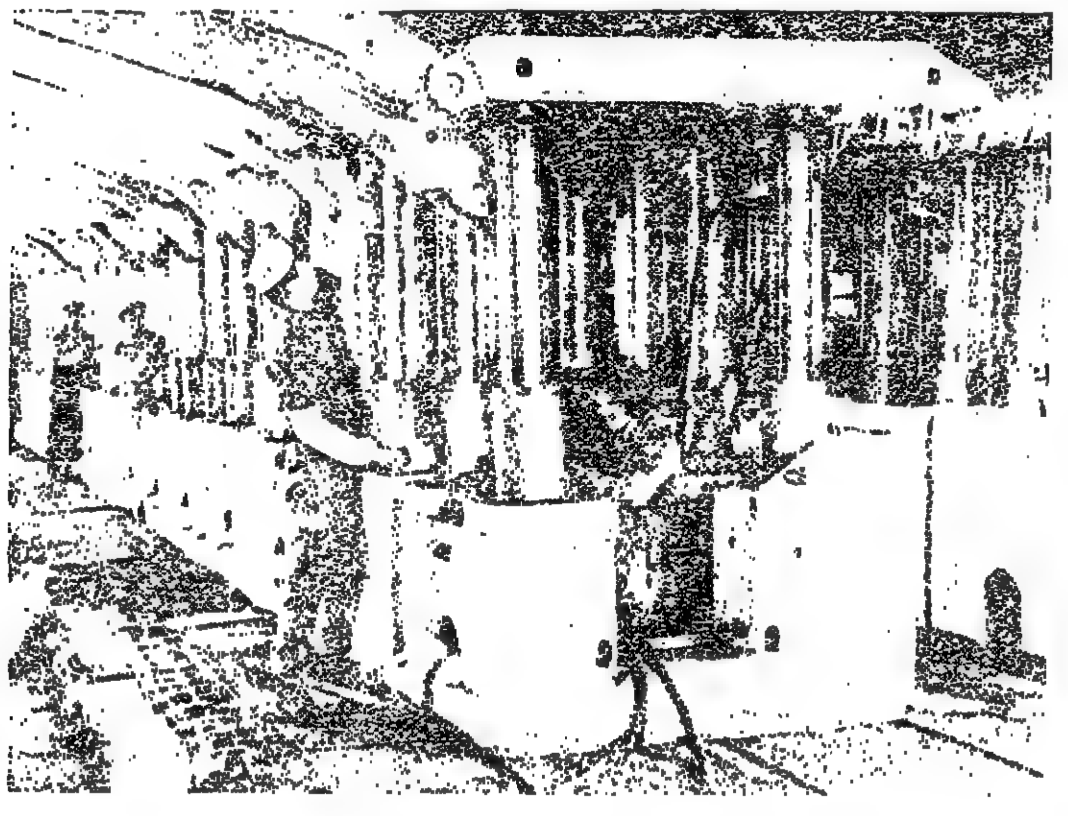
As against the diminished but more realistic prospects of future Chinese capital purchases for the coal industry, orders last year amounted to a massive $1bn of which about 50 per cent came from West Germany. Much of the German equipment is believed to have been for new open-cast mining in Jilin province.

Dowty Mining of Britain sold £81m worth of roof support systems, armoured face conveyors and belt conveyors. Gullick Dobson and Anderson Strathclyde also made smaller equipment sales. Dowty Mining Equipment also won an £8m contract to equip a factory to produce hydraulic units for roof support systems — a deal reflecting China's desire to upgrade its own equipment industry. An advantage British manufacturers have is the Chinese preference for long-wall techniques, reflecting Britain's early influence on the development of the industry.

Coal has accounted for a diminishing proportion of China's energy consumption, dropping from 97 per cent in 1952 to 68 per cent in 1977. Increased demand will result from both the switch to coal-fired power stations and the growing needs of industrial consumers such as the iron and non-ferrous metal industries. A major problem is to increase the supply of high-grade coking coal as China's coking coal deposits are of poor quality.

About half of China's coal output comes from the north and the north east, with Shanxi province alone accounting for 70 per cent of the nation's reserves. Coal resources in the west and south have not been extensively developed. A third of output is still produced by small, often uneconomic and inefficient mines that are a legacy of the Great Leap Forward. It is these that the Government would like to phase out but it faces major difficulties over the resulting loss of jobs and the inadequacy of the transport system to ferry coal to rural or isolated areas.

D.H.



Hydraulic pit props being made at the machine shop of Tatung coal mine in Shansi province

Blackouts a regular order of the day

ELECTRICITY

IN PEKING blackouts are common occurrences in parts of the city and some factories have to work alternate days. Outside Shanghai, the steam turbine factory—one of the biggest power equipment manufacturer in the country—is forced to operate three shifts in a day. In Wuhan the giant new steel complex is virtually idle.

Throughout China a visitor gets continuing first hand evidence of the seriousness of the country's power shortage. An official from the Ministry of Electricity in Peking says that industry as a whole has a 15 per cent shortfall of its requirements. The well informed Hong Kong journal Cheng Ming puts the figure at 20 per cent. Continuing references in Ministerial speeches to power as "the weak link" in the economy underlie its importance as a constraint on economic growth.

Vice Premier Yu Qiulu, outlining the national economic plan for 1979 to the recent National People's Congress, said that steel production was being held down to enable more power to be diverted to light industry. He warned that fuel and power supplies would remain tight "for a fairly long period." Power output is scheduled to grow this year at 7.2 per cent or below the planned 8 per cent growth in industrial output.

Network

Peking is aware that there is no short cut to getting any substantial increase in power generation. New coal mines need to be developed and the rail network that handles the bulk of coal traffic vastly improved. Hydroelectric plants take years to build and will require enormous investment in transmission lines. The domestic power equipment industry is some 15-20 years behind the west in its technology. Imports of power plants from the west and Japan, which increased sharply in the early 1970s, fell off in 1976 and 1977 and are still running well behind what is needed to prevent power shortages from further restraining industrial growth.

Indicative of some of the difficulties that have to be faced are the problems of the Steam Turbine factory at Shanghai. Accoladed last year as one of the "Daqings" of Shanghai—at a time when "Learning from Daqing" was still in fashion—it is a seemingly well run enterprise with a workforce of 8,000 that produces mainly 50 MW and 125 MW turbo-generator sets as well as one or two 300 MW sets a year. The 125 MW sets are serially produced in China and are the backbone of most large, Chinese equipped power stations. Only a few Chinese made 300 MW units are in use.

Production at the plant reached a peak of 1,700 MW in 1973, and the target for this year is only 1,500 MW. The numerous machine tools undergoing repair or alteration bear out the director's claim that priority is now being given to improving quality rather than increasing volume. Quality was poor in 1973, he adds.

The high pressure 125 MW set was designed at the plant, he says, on the basis of the same Czech technology used to manufacture medium pressure 25 and 50 MW sets in the 1950s. The result was that the factory ran into problems of turbine blades breaking, excessive vibrations and low fuel efficiency. Some of these difficulties have still not been removed. He says that the design of the 300 MW set was also based on upgrading Czech technology. But it seems clear that difficulties with this have been far more severe. Officials in Peking have admitted to visiting delegations that they are having a great deal of trouble with the 300 MW units and that the design technology was inadequate.

Behind the plant is a half finished extension in which the factory had planned to build 600 MW turbo generator sets—still being tested in China. The first units had been scheduled for completion in 1982-83, but construction work has now been slowed down. The director, with the blessing of the Ministry of Electricity in Peking, wants foreign collaboration in designing a 600 MW unit. The time needed to choose a partner is one reason for the slowdown. The other is that foreign collaboration has only recently been encouraged. When work first began on the site, the official line from Peking was self sufficiency as preached by Mao's wife and the other radicals.

Domestic equipment manufacturers provide the bulk of China's additional new power capacity. Last year they increased output of power generating equipment by 52 per cent to 4,800MW—a remarkable rise even in a year of fast recovery. But by no means all of this would have resulted in a net gain to capacity. The Shanghai turbine plant says that 20 per cent of its output goes to replace obsolete or broken equipment. Nationwide, American estimates are that some 30 per cent of production of new generating equipment is used for replacement purposes.

In increasing thermal generating capacity China will also have problems in switching over to coal-firing. Vice Premier Yu Qiuli, in his address to the congress, emphasised that former coal-fired generating sets that had been transformed to oil must now be changed back. But at the Min Hang power station near the Shanghai Steam Turbine Plant, the coal-firing equipment had been destroyed during the Cultural Revolution, officials at the station said. Similar action must have been carried out all over China at a time when Peking was putting its weight behind more oil fired power stations.

In the 1971-75 period China tried to make good some of its shortfall in generating capacity and to upgrade its technology by foreign imports. Some $350m worth of plant was contracted for to add 4,500 MW of capacity. But in 1976 and 1977 there was a hiatus in major new orders which will be reflected in further power shortages in years to come. Peking resumed negotiations for large orders with Western power suppliers last year, but many of these have now been held up by the revisions of the long-term plan. GEC and Northern Engineering Industries (NEI) have submitted proposals for separate stations—one that would have originally comprised two units of 350 MW near Peking and the other of two units of 660 MW at Hsuchow in east central China. The Chinese have since raised doubts over the sites and the type of coal to be used, but the prospects that the projects will eventually go ahead still look hopeful.

Shelved

What does seem to have been shelved for the immediate future are any plans for nuclear power stations.

The official press has of late spoken of speeding up both hydro and coal-fired power stations. China has the largest potential of hydroelectric power in the world and hydroelectric plant currently accounts for about 28 per cent of installed capacity. The snag is that most of it is located in the west and thus would require an extensive transmission network to carry it to the population centres. There are only three large grid systems in China, and China's technological capability in manufacturing transformers and switchgear is probably behind the rest of its power equipment industry.

Among schemes picked out for more rapid development are the Longyangxia hydropower station on the Yellow River, Baishan hydropower in the north-east, Dahua hydropower in Guanxi Zhuang autonomous province, Xierhe power station in Yunnan, Dagang thermal plant in north China and Yuanbaoshan power plant in Liaoning.

Mr. William Clarke, the U.S. expert on China's power industry, has estimated that to support an industrial growth rate of 10 per cent China would have to have added last year 5,300 MW of installed capacity. In fact, the Chinese claim to have added 5,000 MW though industrial growth increased by over 13 per cent. In the short run there are probably plenty of ways that China can make more efficient use of its existing generating capacity and also conserve power. But in the long run China is unlikely to be an exception to the rule that has been found the case in most rapidly industrialising countries—which is that the rate of growth of electric power needs to be a few points ahead of the rate of industrial growth if industry is not to be held back by shortages.

In the 1971-75 period generating capacity expanded at an annual rate of 11 per cent. There is no reason why this cannot be repeated. But there is now a substantial backlog of power shortage to make good. At the same time the delays over ordering new equipment from abroad in the last two years are likely to exacerbate this in the immediate future.

D.H.

The going is hard

FOREIGN CONTRACTORS

"DON'T IMAGINE that China is going to be a bonanza for the foreign contractor. It's a difficult and demanding market and it's only worth going in if your technology is strong and you're prepared for the long haul," says a British contractor.

He adds "You may have to graft away for several years, spending a lot of money in the process, before you see any real business."

The Chinese are experienced negotiators who do not take unnecessary risks. They like dealing with companies they know and trust. When they are thinking of doing business with a newcomer they want to satisfy themselves about his track record. They do their homework thoroughly. In some cases they decide that one or two countries are leaders in the relevant technology—Japan and West Germany in steel-making plant, the U.S. in large iron ore projects, Britain and West Germany in coal mining—and limit the choice of contractors accordingly. But this does not necessarily mean that the contract is placed quickly.

"It can take at least a year between the first nibble and serious negotiations about a contract, with numerous delegations going to and fro. But when the Chinese start negotiations, they are businesslike and straightforward. They can drive you mad on price, but they can be more flexible on the details of the order than most of the East Europeans."

Before placing the latest batch of contracts with Lurgi the Chinese made a very careful study of what the company had to offer. "They gave us business in precisely those areas where we knew we were strong and avoided those where we were weak," says Dr. Dietrich Natus, Lurgi's chief executive. "They have excellent knowledge of the Western market."

In pre-contract discussions the Chinese expect patience and mutual respect. Mr. John Bing, manager of Pullman Kellogg's China operations, says: "One must realize the system does not move quickly. One must always act reasonably. We all know we should be slow to anger. With the Chinese one must be even slower."

Lengthy

Negotiations may well be lengthy. "If you are sending a team of negotiators, send only senior, technically competent people. And give them the authority to take decisions if they have to. Send them without a fixed time schedule. Make their commitment to the negotiations their only commitment for as long as negotiations continue."

Trust and mutual understanding are only built up over time and this is one of the reasons why the Chinese have a high regard for companies like East Asiatic and Krupp which have made a long-term commitment to trade with China.

For the contractor selling technology or complete plants direct negotiations are normally held with the China National Technical Import Corporation (Techimport), with an active role played by the Ministry which will operate the plant. But one of the frustrations is the difficulty of knowing precisely where the decision-making authority rests.

Major purchases of foreign technology have to be approved by the State Planning Commission and it is at that level that some companies have directed their lobbying efforts.

It is difficult to tell from job titles what authority a particular Minister or official may have. Even after the contract has been signed the contractor finds the number of agencies involved somewhat bewildering. "We are introduced to the director of this or that corporation or bureau, but we are never quite sure where he fits into the hierarchy or who his boss is — and we doubt whether the Chinese do either."

When work on the contract begins companies have to be prepared for far more detailed discussions than they would expect in the U.S. "They hire you for your technical knowhow, but you still have to prove the validity of your technical proposals," says Mr. Les Trew, project director for Kaiser Engineers, which is providing engineering services for a big iron ore project at Sijiaying in Hebei province. "Review meetings which take two-three days in the U.S. may take at least three weeks in China. They are attended by hundreds of engineers who are very knowledgeable and want a full explanation."

Mr. Trew comments that although some of these engineers "know more academically than I do" about ore benefication, they have had no practical experience of the processes or the equipment. "They are taking a quantum leap in technology."

In implementing projects companies may have to contend, not only with the bureaucracy, but with the deficiencies in China's infrastructure. Transporting heavy chemical plant into Shanghai, by barge up the Yangtse and then to a remote site where the utilities and housing are being created from scratch—that is a formidable undertaking and even the Chinese may underestimate the difficulties. Scheduling problems can be aggravated by the failure of Ministries to co-ordinate their respective roles.

For the foreign engineer who stays on the site for months China has to be regarded as a hardship post. In one major contract the foreign technicians were allowed one week's rest and relaxation in Hong Kong every six months—more onerous conditions than are normal in, say, the Middle East. The sense of isolation is greater in China, where the Chinese engineers and managers, though always considerate and courteous, are discouraged from mixing socially with foreigners.

Aspect

Another aspect of the isolation is that contractors are given no more information by the Chinese than is necessary to carry out their particular contract: there is no general gossip about what other companies are doing or about the state of the industry. (Some foreign companies are not unhappy about this, since they can be sure that their own commercial and technical information is not being passed on to anyone else.) When companies send negotiators and technicians out to China, they have to be sure that they are temperamentally as well as technically qualified for the job.

Normal office accommodation in Peking is not available, but a number of companies have booked suites of rooms in one of the main hotels on a semi-permanent basis, staffed either by their own representatives or by locally hired Chinese-speaking expatriates. One Hong Kong company reckons to be spending about £50,000 a year on a three-man "office" including a locally hired secretary/office manager. Another is fortunate enough to have hired a Chinese who has good personal connections inside the bureaucracy and so is able to arrange appointments for visiting executives.

The accommodation problem will be eased if and when the proposed Foreign Trade Centre is built. An American consortium, consisting of Kaiser Engineers, Turner International and Gerald D. Hines International, won a contract in March to design the Centre, which will include an office tower 40-50 storeys high, an 800-1,000-room hotel, a convention centre and living quarters for 600 foreign trade personnel and their families. Construction is due to start next year, with completion scheduled for 1982.

Commercially, however, conditions for the foreign contractor could get more difficult. As China seeks to conserve her foreign exchange, payment arrangements may become more complicated, involving compensation trade, direct equity investment, more local procurement, assistance with exports of Chinese-made products and perhaps forms of technology transfer in which the foreign partner will see little scope for profit.

Yet the attractions of the market remain: China's long-term need for foreign technology, her raw material resources and vast home market, her record of prompt payment and honouring contracts to the letter. A good many companies are convinced that if they are patient, persistent and flexible, the rewards will come.

G.O.

Cutting through the red tape

JOINT VENTURES

ONE ELEMENT in Lenin's New Economic Policy in the early 1920s was the attempt to enlist the aid of foreign capital, through joint ventures, in the development of the Soviet Union's raw materials and in the manufacture of industrial and consumer goods which the country needed. Although the policy was not successful and few agreements with foreign companies were concluded, Lenin's example provides a partial ideological justification for China's new law on joint ventures, adopted by the National People's Congress last month. Whether the law will have any more lasting consequences than the Soviet decree on foreign concessions, passed in November 1920, should become clear over the next few months.

China's law provides that foreign companies will be able to set up limited liability companies jointly owned with Chinese enterprises, subject to authorisation by a new body, the Foreign Investment Control Commission; another new body, the China International Trust Investment Company, will co-ordinate the use of foreign investment and technology. The foreign partner will normally hold not less than 25 per cent of the capital (no upper limit is stated) and he may contribute "cash, capital goods, industrial property rights, etc." as his investment in the venture. The foreign technology or equipment has to be "genuinely advanced and and appropriate to China's needs."

A joint venture equipped with up-to-date technology may apply for a reduction of, or exemption from, income tax "for the first two or three profit-making years." If the foreign partner reinvests his share of the profit in China he may apply for a partial rebate on income taxes paid. The law provides for the remittance overseas of profits and of salaries earned by foreign employees in the joint venture. As for the management, the Chinese partner will appoint the chairman and the foreign partner one or two vice-chairmen.

The law on joint ventures is a logical development from other forms of co-operation with foreign companies which have been put into operation over the past two years and particularly since the spring of 1978; all these arrangements are designed to permit the introduction into Chinese industry of foreign equipment and knowhow in a way which minimises the expenditure of hard currency. The simplest form is processing on consignment, whereby a foreign company supplies raw materials to be processed in China for a fee. In product buy-back or compensation trade agreements the foreign partner supplies capital equipment which is paid for in goods manufactured by that equipment.

For example, in August last year Itoman, a Japanese trading house, signed a deal with the National Textile Import and Export Corporation whereby it would supply 100 modern sewing machines and 15 technicians to a Shanghai apparel factory and receive in return 300,000 suits of pyjamas and a certain number of blouses every year for five years. Cotton will be purchased in China and the garments will be sold under Itoman's brand name: the production in China will replace part of Itoman's supplies now obtained from South Korea and Taiwan.

About a score of other Japanese companies have made similar arrangements, mostly in textiles and garments but also covering electronic products such as digital watches. Companies in Europe and the U.S. have also made compensation trade agreements, but the most active have been Chinese entrepreneurs based in Hong Kong, for whom China provides a much needed source of cheap labour and land. There are thought to be between 400 and 500 companies which have either started production in China on the basis of compensation trading or are negotiating to do so. Most of these projects are very small, employing on average between 30 and 70 people, and there is a natural preference for the Shenzhen area just across the border from Hong Kong.

Discussion

Compensation trade may be used as a means of financing major investments in new mines for coal, iron ore and non-ferrous metals: proposals for bauxite development and aluminium smelters are believed to be under discussion along these lines with European and American companies. But the joint venture formula seems intended by the Chinese authorities for a different purpose — to inject foreign technology into manufacturing industry, particularly but not exclusively light industry.

Vice Premier Gu Mu told us in an interview that joint ventures would be especially welcome in such fields as electronic instruments, meters, digital watches, computers and domestic appliances. One proposal which was well advanced even before publication of the law is for the manufacture of tape recorders in Shanghai by a Japanese company, Toho Denki. This proposal, which was negotiated with the China National Light Industrial Products Import and Export Corporation and the Shanghai Electronic Equipment Industry Corporation, provides for production to be split equally between exports and domestic sale.

Although levels of technology are relatively low there is a substantial electronics industry already in existence in major cities like Tianjin and Shanghai. There is certainly scope for introducing up-to-date designs and manufacturing techniques into these factories. But the question which a number of foreign companies are asking is whether it is possible to achieve the level of quality and cost necessary for competition in the world market.

China's advantage of low wages is largely offset by poor productivity, and some foreign companies are doubtful of their ability to increase productivity by a sufficient margin, even allowing for the introduction of incentive payment schemes. There are fears about the ability of the foreign executives to cut through the Chinese approach to management, described by a Hong Kong businessman as "a never-ending system of consultation and discussion."

The fundamental question, the answer to which will only come through experience of joint ventures, is whether the Chinese political and economic system can accommodate the presence of capitalist-inspired enterprises, geared to profit and to the market. While the human material is certainly trainable, the sceptics believe that the "system" will prove an insuperable obstacle; they prefer the less risky device of compensation trade, where their "investment" in the form of capital equipment is paid for in goods whose price and quality is contractually specified.

Amid all these doubts it would be surprising if the growth of joint ventures was not slow and halting. Yet the potential of China as a manufacturing base from which to attack Asian and other export markets cannot be ignored. For European and American manufacturers, eager to find a way of competing against the Japanese in South-East Asia, China may hold the key. As Taiwan and South Korea follow Hong Kong's example in moving up-market, the attractions of China as a low-cost production centre may increase. Some European companies believe that there may be scope in China for motor-vehicles and other engineering products which are produced in volume, using large amounts of labour and relatively mature technology.

Much will depend on how the Chinese authorities fill in the details of the new law and how they respond to the first proposals from foreign partners. Mr. Owen D. Nee, Jr., an American lawyer in the Hong Kong office of Coudert Brothers, who has been actively concerned in the discussions leading up to the new law, believes that it will be followed in due course by a patent law, a copyright law and in a few years' time by a full commercial law; he also expects China to join some of the major international trade conventions. If this forecast is correct, the legal framework for the foreign investor will become steadily more acceptable.

G.O.

A readjustment of policy

CHINA'S TRADE is one sector of the economy which so far shows no signs of the effects of the "readjustment" policy, introduced last February. Total of the economy which so far came to $12.4bn (converted at $1 yuan 1.72), over 40 per cent up on the corresponding period last year and well on the way to reaching the planned figure for the year of $27bn.

Last year's total was $20.6bn, over 30 per cent up on 1977, as much as the overall percentage increase expected this year. The target for imports for 1979 is 32 per cent and for exports 15 per cent, which both seem almost certain to be reached.

Peking will clearly have a deficit on trade this year as it did in 1978. Last year, however, the overall balance of payments (which includes invisibles like tourism and, most valuable of all, remittances from expatriate Chinese to their families in China) was favourable. With the gap between exports and imports growing bigger all the time, this seems unlikely this year, but Peking will probably fund this out of its commercial borrowing.

After many months of speculation, Peking has this year concluded approximately $26bn in foreign credits, of which about $3bn is in commercial loans from Western banks. The total includes about $10bn from Japan, of which $2bn was a commercial loan thought to have been used to finance Japanese plant purchases. So far, it is believed, there has been no drawing on the other credits.

In contrast to last year, when the Chinese almost signed more contracts than they could actually afford, a much more carefully planned trade programme is now under way. The "re-adustment" not only called for reductions in capital construction at home but froze all the negotiations the Chinese were involved in abroad. Since then the credit agreements have enabled the Chinese to go ahead with the purchases from Japan, and the continuing travels of Chinese delegations to Europe suggest that in due course at least some of the schemes previously under discussion will go ahead.

But while the foreign exchange shortage was the

MAIN TRADING PARTNERS 1978

($m)	Exports to China	Imports from China	Total
Japan	3,049	2,030	5,079
W. Germany	995	367	1,362
U.S.	824	324	1,148
Australia (11 mos)	456	129	585
USSR	255	271	526
Canada	442	83	525
France	197	227	424
Italy	188	199	387
Britain	175	212	387
Netherlands	132	125	257

immediate reason for the freeze, there were other and more profound reasons, such as China's inadequate infrastructure and its lack of technicians. These will take much longer to solve than the money problem, and it may be that countries other than Japan will have to wait some time.

Escalating

The rapidly escalating trade figures of this year are the outcome of orders placed last year, and though no breakdowns of statistics are yet available, it seems likely that the flow of Japanese and West German steel and equipment, plus the substantial orders for grain have helped to swell the total. For mining equipment alone the Chinese last year placed orders worth $1bn, $500m from West Germany and $200m from Britain.

Last year the Chinese were discussing with Western companies purchases of power equipment, steel plant, railway equipment, non-ferrous metals, mining plant, aircraft, chemical plant and vehicle production lines. Almost all the Western countries were involved, including the U.S., although it then lacked diplomatic relations. Some large contracts have been signed, with Japan and Germany the main beneficiaries, but many others have been deferred.

"Readjustment" meant a reversal of trade priorities. Alarmed by the costs of investment in heavy industry and the long period needed to bring new equipment into production, the Chinese announced a new policy of agriculture first, but closely allied to light industry development since much of the raw materials for it comes from agriculture. Light industry, argued the Chinese, is quick and cheap to set up, provides consumer goods for the home market and exports to earn foreign currency.

Thus they are now focusing on stepping up light industry exports and importing light industry equipment. This they plan to do either through joint ventures or compensation trading, both of which mean considerable saving of foreign exchange. However, compensation trade has not proved attractive to potential suppliers of heavy industrial equipment.

The Chinese themselves are uncertain about how quickly trade can be increased, essential though it is for China's modernisation. It seems unlikely that this year's rise could be anything like maintained, though some officials talk about a 20 per cent growth (10 per cent in real terms) over the next few years. Researchers in the U.S. Commerce Department have suggested a possible average growth of 20 per cent for imports and 12.5 per cent for exports up to 1985, with a debt for that year's end of $26bn, which would fit with what the Chinese have actually acquired in credits. This scenario also postulates a 10 per cent growth in invisibles, rising through 15 per cent in 1981-82 to 20 per cent for 1983-85.

As far as imports are concerned, the Chinese problem will be to hold them down. They are unlikely to be able to afford to allow them to continue at this year's rate of growth of 33 per gent. Grain imports are already at an all-time high at a reported 12m tonnes. Yu Qiuli, the Planning Minister, said in his National People's Congress report in June that imports of technology and equipment would this year be 220 per cent up on last year and would cost nearly $3bn. Such a rate of increase will manifestly have to be slowed.

This the Chinese evidently plan to achieve by spacing out their requirements over the next few years, cutting out some of their projected steel industry development. It seems unlikely that the pattern of imports will change much from recent years; the last year for which a breakdown is available (1977) shows foodstuffs (mostly grain and sugar) at 17 per cent, industrial supplies (chiefly steel at 22 per cent) at 65 per cent, and capital goods 18 per cent.

But increasing exports will be the main headache. In 1977 36 per cent of exports were agricultural, and a further 16 per cent textile yarn and fabric. Oil accounted for 10 per cent, and clothing, footwear and other light manufactures together for 20 per cent. What are the prospects for pushing up these items, or adding new ones?

Agricultural products — frozen rabbit, for example, or canned fruit — will do all right if the Chinese provide (as they are now doing) incentives to the peasants and improve their overseas marketing. As to oil, the Chinese need it themselves and unless they are very lucky are unlikely to have a surplus except for sale to Japan, to which they are already committed to the level of 15m tonnes annually by 1985.

For textiles they have secured a more generous quota agreement with the EEC and hope to do the same with the U.S. They plan to market their light manufactures more agressively in the West, starting with an export delegation to Europe this autumn which will seek professional marketing advice. They hope in due course to push up their exports of metals and minerals (in 1977 only 2 per cent of the total) but this will need heavy investment first.

China has already increased its formal trade links substantially. Last year it signed long-term agreements with Japan and the EEC, and since then Britain, France, Italy and the U.S. have signed individual trade pacts (though the U.S. one has yet to be passed by Congress).

Most growth seems likely to occur in trade with the U.S., where the Chinese have barely started to buy industrial equipment, and where possible tariff changes will mean the Chinese can sell more. Japan is already well ahead of the field because of its proximity and special links, but the Chinese will certainly spread purchases around for strategic reasons. Of the European countries, West Germany seems likely to maintain its huge lead over France, Britain and Italy.

When the next round of Chinese buying begins, the picture may change somewhat as Peking has invited tenders for the same plants from different companies and countries and there is no indication yet as to which is favoured. As the financing is becoming increasingly complex, the Chinese are finding it more and more difficult to compare prices. One factor that should not be forgotten is the role of the Soviet Union, last year well up in the table of trade partners. It could well resume playing a part in China's industrialisation since it does not need to be paid in hard currency.

C.M.

A group of Japanese tourists in Peking. China is beginning to encourage tourism on an international scale.

Time to draw breath

TRADE WITH JAPAN

JAPAN'S TRADE with China has been growing extremely fast since the beginning of last year when the two countries signed a long-term trade agreement calling for the exchange of $20bn worth of goods up to 1985. Expansion, however, has not been free from problems: indeed there are now considerable doubts about the prospects for the further growth of two way trade (in 1980 and beyond).

The stimulus to Japan's exports to China in 1978 was provided by the start of China's economic modernisation programme which led to a sharp increase in purchases of Japanese machinery and capital equipment (up almost 200 per cent over the 1977 figure). The framework for trade expansion was provided, in large part, by the two-way trade agreement (signed in February 1978) which called for an equal exchange over eight years of Chinese oil and coal for Japanese industrial plant and construction machinery.

The agreement was the first in the history of Sino-Japanese trade relations to commit Japan to long-term targets for the purchase of Chinese oil and coal (previously purchasing has been done on an annual or semi-annual basis). It was decided in March 1979 to extend the agreement up to 1990 (from the original 1985 terminal date) and to expand the value of goods to be exchange from $20bn to between $40bn and $60bn. Details of this extension still have to be settled, however, and may remain undecided for some time to come. Both the 1978 and the 1979 version of the agreement exclude the more traditional items of Sino-Japanese trade including steel and fertilisers (from Japan) and agricultural products.

Contracts

Following the signature of the agreement in February, 1978, China began to place a series of plant contracts with Japanese suppliers, starting (in May) with the signature of the $2bn contract for the Baoshan integrated steel plant (for which the main contractor is Nippon Steel Corporation). The Baoshan contract was followed by 23 other plant contracts ranging in value from $200m downwards. The total value of contracts won by Japan during the year was over $2.6bn, with payment to be made for the most part in cash, since China and Japan were unable to agree on the currencies or interest rates to be used in deferred payment financing.

The flood of Chinese plant contracts diminished sharply at the start of 1979 and in February the Japanese exporters received their first major shock since the signing of the long-term trade agreement one year earlier. Companies involved with 22 out of the 24 contracts signed in 1978 (including that for the Baoshan steel plant) received telexes from the Chinese state trade corporation which had ordered the plant informing them that import licences were not being granted by China's Ministry of Foreign Trade and that, therefore, the implementation of the contracts was being suspended.

The Chinese telexes alluded to delays in the completion of negotiations on various loan proposals made by Japanese banks to China as one of the main reasons for the withholding of export licences. These proposals included an offer by 22 Japanese foreign exchange banks of a $2bn syndicated loan at an interest rate of 0.75 per cent over LIBOR (deemed unacceptable by the Chinese, who were demanding 0.25 per cent).

The suspension of some $2.6bn worth of 1978 plant contracts (coupled with rumours that the contracts might be cancelled altogether) caused something approaching panic among Japanese plant exporters and trading companies (for whom the Chinese orders represented by far the largest chunk of overseas business they had secured during 1978). It also had the effect of putting heavy pressure on the cautious Japanese banking community to compromise with China over the terms of its proposed $2bn syndicated loan.

After learning (in April) that a number of British banks had initialled five-year loan agreements with China in which the interest rate was set at 0.5 per cent over LIBOR, the Japanese banks decided to offer China a similar rate and China accepted. The result was the signature of a letter of intent in May in which 22 Japanese banks, headed by the Bank of Tokyo, undertook to provide China with a $2bn credit line on which drawings would be repayable over four-and-a-half years at 0.5 per cent over the six month LIBOR rate.

A second group of 30 Japanese banks undertook to provide a short term credit line of $6bn (repayable over six months with an interest rate of LIBOR plus 0.25 per cent). In a third, almost simultaneous agreement, the Export-Import Bank of Japan undertook to make a Y420bn development loan to China for use in the development of Chinese oil and coal resources (needed for China to produce the oil to be shipped to Japan under the long-term trade agreement). The eximbank loan was extended on exceedingly generous terms (a 6.25 per cent interest rate and a 15-year repayment period). These were justified by the claim that the loan was "untied" —i.e. China was not obliged to use the ex-imbank's yen funds for purchasing machinery and equipment in Japan.

After the issue of letters of intent by the Japanese banks guaranteeing long and short-term loans to China, the majority of the companies which signed plant contracts during 1978 were notified that their contracts had been "reinstated" on the original cash payment basis and without any change in the price or terms of the original contract. This news came as a relief to most companies, despite the fact that the four month delay caused by the suspension announced in February had involved the Japanese exporters in heavy extra costs (due in part to the impact of inflation on original cost estimates and partly to the fact that work in progress had been halted while the future of the contracts was in doubt). Two contracts which were not reinstated by the Chinese on the original terms were the Baoshan steel contract and a Y15bn petrochemical plant contract signed by Toyo Engineering Company and Mitsui Bussan.

Downstream

The petrochemical plant contract was excepted by China from the general reinstatement of other contracts because of the involvement of the Peking Municipal Government in downstream plants connected with the project. (The Peking authorities, as of early August, were still apparently trying to raise funds to execute their portion of the scheme). In the case of Baoshan China asked for, and obtained, a change in the financial basis of the contract from cash payment to five years deferred payment. The payments are to be made in equal portions of dollars and yen, thereby halving the foreign exchange risk which China would have borne if it had undertaken to make deferred payments denominated entirely in yen. The interest on the loan has been set at the OECD minimum of 7.25 per cent.

After tying up the loose ends left over from its 1978 plant purchasing spree, China signed three more plant contracts with Japanese companies in late June and July 1979. The three contracts were: a Y3bn cashmere processing plant to be supplied by Unitika and Mitsui Bussan, a Y900m special film plant from Chugai Boeki and a black-and-white TV tube plant to be supplied by Matsushita (for which no price has been published although the capacity is set at 1.6m tubes per year).

There then appeared to be something of a lull as China published its law providing for the establishment of foreign joint ventures and awaited the Japanese (and other overseas) reactions).

CHINA JAPAN TRADE
$m

	Chinese exports	Chinese imports
1975	1,531	2,259
1976	1,371	1,663
1977	1,547	1,939
1978	2,030	3,049
1979 (January-June)	1,286	2,053

THE LONG-TERM TRADE AGREEMENT

	February 1978 version	March 1979 revision
Period	1978-85	Extended to 1990
Value	$20bn in two way trade	$40bn to $60bn (to be decided)
Items	China to export coal and oil	Unchanged
	Japan to export plant, technology, construction materials	To be decided

CHINESE EXPORTS (m tons)

	Oil	Coking coal	Steam coal
1978	7.0	0.15-0.2	0.15-0.2
1979	7.6	0.5	0.15-0.2
1980	8.0	1.0	0.5 -0.6
1981	9.5	1.5	1.0 -1.2
1982	15.0	2.0	1.5 -1.7

(Post-1982 volumes to be decided by the end of 1981.)

Companies were studying the Chinese law intensively in late July and early August, but initial reactions to it were not especially favourable. It was being noted in Tokyo that the law left a notable number of questions unanswered about the terms on which foreign companies would actually operate (patent and taxation questions were among those which seemed to worry the Japanese side most). Uncertainties like these could raise legal problems for Japan's own foreign investment approvals procedure, which requires that the Government satisfy itself about the basic conditions likely to affect the profitability of a proposed overseas investment venture before granting "automatic approval" for an investment application.

Japan's doubts about the Chinese joint venture proposals could turn out to be similar to the doubts of its banks about Chinese loan requests—in other words the Japanese will definitely not stand aside if others decide to go in. However, it does seem likely that Japan will take its time before committing itself to the large-scale ventures in which the Chinese seem to be interested (for example, in the motor and electronics industries). While it hesitates there could be some loss of momentum in the development of two-way trade.

Charles Smith

A taxing overhaul for company cars

BY DAVID WAINMAN

THE "PERKS" of a company car and free petrol on the company are under question by the Inland Revenue. Question is, in the narrow sense, a more accurate word than challenge: the Revenue has merely issued a discussion paper, asking for taxpayers' comments. But it is clear that change is on the way.

There are five areas in which comments are requested:

● Whether, and when, the "scale rates" could be adjusted to more realistic levels. These scales quantify the amount upon which the great proportion of company directors and the higher paid are taxed in respect of the benefit described as the availability of a car for private use. And the Revenue indicates that the way in which the scales differentiate small cars from the more expensive ones is also under examination;

Onus on the employer

● Whether other changes should follow: for instance, could there be changes and simplifications in the present special rules for those whose business use of their cars is only very small, and also for those who drive more than 25,000 miles per annum on business?

● Should all of these changes apply also to taxpayers earning less than £8,500 per annum as well as to directors and the higher paid? Broadly speaking, benefits not capable of being turned into cash have always escaped tax in the hands of those earning less than the threshold figure at which this part of the tax legislation begins to bite;

● Whether tax should be paid under PAYE, weekly or monthly, on whatever figure is determined to be the benefit—and here it is suggested that instead of the Revenue achieving this by building some estimated figure into the employee's "coding" at the beginning of the year, the onus should be put on to the employer to deduct tax by reference to the actual benefit received by each employee in the week or month concerned, thus taking into account any change in the car available to him, or in his use of it;

● How petrol could better be taxed. The Revenue acknowledges that the present state of the law is uncertain, even though it may have its own views of the effectiveness of arrangements involving company pumps, accounts with garages, credit cards and other similar schemes. It indicates that it would be a prerequisite of any new arrangements devised that there should be a further tax charge where the employee received without cost not only the car, available for private use, but also the petrol so consumed.

All of these questions arise from the Government's objective, stated in the Finance Bill debates, to discourage further growth in fringe benefits and if possible to bring about a contraction. Company cars available for private use as well as for business journeys, have undoubtedly been the form of perk in which there has been the largest growth over the past three years. And that growth is very clearly visible to everyone who uses the roads at week ends as well as during weekday rush-hours. It is also only too obvious in the petrol consumption statistics; the Revenue's discussion document makes it clear that it cannot countenance a system which undermines Government policies on saving energy by allowing some taxpayers their private motoring without the real costs hitting their pockets.

But taxpayers and their employers might well counter by asking why it is that there has been such a growth in the provision of company cars? And the answer must lie largely in the rewriting in the 1976 Finance Act of the benefits legislation — coupled with the employment background against which that rewriting took place.

The Revenue was already concerned, before 1976, at the administrative load created by taxing directors and the higher paid on the running costs of the car and on its "annual value," (then taken to be one eighth of its cost). But the tax charge was only on a proportion of running costs and annual value—the proportion of private mileage to total mileage.

Revenue guess on benefit

A computation was therefore required from every user of a company car every year. It was impossible in advance of this for the Revenue to do more than guess the level of benefit. And it was clear also that the Revenue thought that the figures, when it obtained them, were no more satisfactory as a basis of taxation than its earlier guesses. It depended upon the taxpayers' accuracy in reporting private mileage, an area in which amnesia often seemed to be thought acceptable by those taxpayers. There was one reported case of an individual being jailed for misstating the private usage of his car, but the Revenue was unhappy about its ability to enforce the law. And taxpayers generally thought both the law itself, and the Revenue's operation of it, disreputable.

In 1976 Mr. Joel Barnett, then Chief Secretary of the Treasury, repealed the existing benefits legislation and substituted completely rewritten provisions; new might not be as accurate a description.

The basic framework survived. Only company directors and those earning over £5,000 (now £8,500) per annum were within these special provisions. Cash paid to them as reimbursement of expenses was to be taxed, and so also were non-cash benefits provided. In this latter case, it was the cost to the company which was taken to be the measure of the employee's benefit. The company's "annual cost" where the benefit consisted of allowing an employee to use an asset which remained its property required definition, and it is in this area that the rules for cars were significantly altered.

It continued to be recognised that employees made taxable on all of these reimbursements and benefits could still claim, *vis-a-vis* the Inspector of Taxes, that the expenditure had been incurred wholly, exclusively and necessarily in the performance of their duties. And where the employer made available one of his own assets partly for business purposes, it also continued to be recognised that the employee should pay tax only on the remaining proportion—the amount which directly benefited him.

TAX AND THE COMPANY CAR

Taxable scale benefits in respect of availability of cars for private use	Present scale benefit	Revenue recalculation based on AA figures for 1979 with running costs for 8,000 miles
Cars with an original market value up to £8,000:		
1300 cc or less	190	594
1301-1800 cc	250	695
Over 1800 cc	380	1,044
Cars with an original market value over £8,000:		
Costing between £8,000 and £12,000	550	1,732
Costing over £12,000	880	2,417

Before the 1976 provisions

This last had been the principle upon which all company cars had been taxed until 1976. It continued, with one minor change, to be the basis thereafter for cars the business use of which was insubstantial, taken to be 10 per cent of total use. The employee is, in this case, currently taxed on the private mileage proportion of running costs borne by the employer and on the annual value which is taken to be 20 per cent of the car's original cost, without regard for mileage, until the car is four years old, and 10 per cent thereafter.

For the great majority of cars, however, the 1976 legislation adopted a very different approach. Both annual value and running expenses were wrapped into a prescribed scale figure which was to be the sum upon which the employee was to be taxed—without regard to business or private mileage. The legislation made it clear that it was the availability of the car for private purposes which was to be taxed, not its actual use.

Ingrained in the mind

But even here the concepts of business mileage were so ingrained in the Revenue's thinking that it made an exception for the employee who covered more than 25,000 miles per annum on business. He pays tax on only one half of the scale figure.

Where the Revenue is now admitting that a slip-up occurred was in the fixing of the scale rates. The figures were based on estimates of one half of the standing charges and on running costs for 5,000 miles. The former included road fund licence, insurance, depreciation and interest on capital. The latter comprised repairs, servicing and tyres, but excluded petrol or diesel fuel, because, as the Revenue now makes clear, very few employers were then providing free petrol to employees.

At the instance of the motor manufacturers all of the proposed scales were substantially cut back before the 1976 Finance Act was passed into law. This has not been compensated since. The only change has been a 10 per cent increase, in April, 1978, to recognise inflation.

Joel Barnett . . . 1976 revisions

The view taken by many employers that the scales are a generous under-valuation is also significant. Employers know what is the true cost of providing a car (a cost borne in any event 52 per cent by the Revenue) but they have also been painfully aware over a number of years of the effects of pay restraint.

The Pay Board never fully accepted the Revenue's measurements of car benefits as appropriate for pay restraint purposes—but many employers took it to be so. And the growth in the numbers of company cars was accordingly unrestrained. It was preferable, for those with low business mileage in particular, to have a company car rather than to use their own cars and claim a mileage allowance. This could well now reverse.

Pay restraint is over, at least for the present. Tax rates have been substantially cut. The Government thinks it propitious to question, and by implication to discourage, "perks." In the context of the present energy crisis, private motoring without apparent cost or tax penalty to the motorist is an explosive a process as putting the petrol concern onto a bonfire. Small wonder the Revenue would be less embarrassed if the system could be changed.

First areas of attack

Cars and petrol were the obvious first areas of attack. The second and subsequent are more difficult. Season tickets? Perhaps, but this is a perk which few employers are thought to be providing: The inequity between employees living close to their work and those further out is too apparent. Free or subsidised mortgages? — again, perhaps, but Mrs. Thatcher has firmly committed her party to the continuation of tax deductibiliy of morgage inerest, so that declaring the benefit taxable would seem to give a mirror image increase in the employee's deductions. The real benefit in this case is the assured availability of these very long-term loans, often with less regard paid to income levels than would be the case with a building society, and at lower rates than are paid, net, by other borrowers.

And will the Government review the perk which is so valuable that few people even recognise it as such — the tax deductibility of pension contributions, and their tax-free build up in the trustees' hands from then until they re-emerge as payments of pensions?

Letters to the Editor

New Tap Stock

From Mr. A. Hughes

Sir,—We were told, at the time of the June budget, that the accompanying rise of 2 per cent in minimum lending rate to 14 per cent was, hopefully, to be short-lived. This hope seemed to be reinforced a little later when the Government was leaning on the building societies to persuade them to defer their necessary increases in mortgage rates until January 1, again the indications being that as MLR might well be reduced, this increase might not be necessary.

I am accordingly surprised, therefore, at the issue (August 15) of the Tap Stock of £1bn at 11½ per cent. The previous Tap, of £1.5bn, was suddenly sold out last week, so that the Government coffers were awash, or would shortly be so, with enough money to cover the borrowing requirement for at least a few weeks. If so, why this rush to borrow more money now?

Of course, if someone in Government circles fears or knows that MLR, far from going down, may have to increase further, that would explain any anxiety to borrow more now, before rates rise. Putting that unworthy thought aside, however, I must ask why the Government broker did not elect to wait a short while for the expected fall in MLR to materialise, thus enabling him to borrow more cheaply, thus in turn saving me, and other unhappy taxpayers, a considerable amount of future interest.

Alan P. Huges,
136 Northey Avenue,
Cheam, Surrey.

Obtaining power

From Mr. E. Foottit.

Sir,—When I was at Cambridge in the very early 1930s I read history and recall attending lectures on a subject known as "Political science."

One of the examples discussed by the lecturer was the newly created constitution of Italy by means of which Mussolini obtained and retained power. My recollection is that the peculiarity of that constitution, to which students' attention was drawn, was the election of the Government by the Party.

I have been waiting for some student of political science to write authoritatively in the Press comparing or contrasting (as the case may be) Mr. Benn's recent suggested constitutional proposals with the constitution of Italy in pre-Second War days and speculating on the consequences likely to flow from such proposals if adopted.

E. H. Foottit.
23 Bayley Lane,
Coventry.

The Labour Party

From Mr. V Finlayson

Sir,—Further to your recent excellent editorial on the necessity for a thriving Labour Party, you comment further on Labour Party democracy on August 15.

In as much as many members of the Tribune Group support Jim Callaghan, the issue is not one of so-called Left-Right politics but something much less important. In as much as the constituency sector at the last Labour Party conference voted 2:1 in favour of a 5 per cent policy on wages, they supported Denis Healey and Jim Callaghan so the "power of the Left," whatever that is, does not reside there.

It is not general management committees of the Labour Party that are "deeply flawed" but the nation in allowing democracy to be exercised by only a few conscientious people in all the main parties.

In the main, constituency Labour parties reflect the innate conservative attitudes of the British voter as any Parliamentary candidate knows. Alas there is no coherent movement or ideology behind the actions of a few individuals who are motivated by inner psychological drives. We would all be the better for it if there were. Could not Jim Callaghan redraft Michael Foot back to his honoured position as the conscience of the Party to ensure real argument?

Vic Finlayson.
"Northcote,"
Lansdown Road,
Bath, Avon.

Problems for steel

From the Managing Director Fine Tubes

Sir,—I have read with particular interest your authoritative series of articles on the problems facing the steel industry in this country and overseas.

It appears that British Steel Corporation is seeking to concentrate production of tonnage steels at a few large integrated steelworks to be operated on significantly reduced manning levels, while elsewhere it moves to a product-mix with higher added-value and thus a greater potential for profitability.

Because of the particular problems in carrying through a rationalisation and manpower-reduction programme in Britain it seems probable that BSC will require a substantially longer time to achieve its first objective than its European competitors; the tonnage steel industries of North America, Japan, and the developing countries, are already operating at or below the manning levels which are presently no more than a distant goal for BSC.

Nor is this the full extent of BSC's problems. The rate of technological development in the international steel industry is such that the emerging "third-world" steelmakers, who in the last decade have largely rendered obsolete the European tonnage steel industry, are today commissioning the plants and acquiring the skills to produce the higher-added-value products on which BSC's future strategy depends.

There is disturbing evidence to support this view in your recent report that a single shipment of stainless steel bars from Brazil represented some 20 per cent of British annual consumption and was being supplied at prices reportedly 40 per cent below those current in this country.

BSC's strategy is undoubtedly correct but to be successful it needs to be implemented now and not at some unspecified time in the future. Time, tide, and foreign steelmakers wait for no man.

T. M. Barclay,
Fine Tubes,
Estover Works, Crownhill,
Plymouth.

Mind-boggling satellites

From Mr. P. McClory

Sir,—I was very surprised to read a report (August 9) giving brief details of a Government study into solar-power satellites as a long term solution to our energy problems.

Even if Britain was a strong supporter of the European Space Agency such an idea would be amusing. As it is demonstrably not interested in the possibilities of even near-future projects in space engineering the suggestion, on the face of it, looks derisory.

To get some idea of the sheer magnitude of such a project—and the costs and engineering problems involved—the following projections by the National Aeronautical and Space Administration should be considered. The principle behind these solar satellites is that they would be placed in geosynchronous orbit (stationary) 22,500 miles above the earth. There they would be in almost continuous sunlight. Solar cells would convert the light from the sun to electricity and this would be beamed to earth in the form of microwaves. Ground stations would convert these back to electricity and feed this into the grid.

Each solar satellite would be of mind-boggling proportions. Almost the size of Manhattan Island, they would be about 12 miles long and 3 miles wide. Each structure would contain around 36 sq. miles of solar cells but generate only 10MW of electricity (half the output of the smallest nuclear power station). NASA estimates that a construction team of 550 people would be needed working in deep space to build just one satellite. With such formidable statistics it will not come as a great surprise to learn that projected costs for such a venture are somewhat high. At present day prices the 100,000 tons of materials needed to be lifted 22,000 miles into space would cost about £25 a pound. A simple calculation shows that a typical solar-power satellite would cost in the region of £56bn! However, some U.S. reports consider this figure far too high and feel it could be reduced to around only £7bn! This happens to be near the *total* earnings of the UK from North Sea oil this year (including the recent Organisation of Petroleum Exporting Countries' rise).

You also mention that this study suggestst hta many departments of Government, Energy, Industry and Trade, Home Office, Health, Defence, Agriculture, Environment and the Foreign Office will be involved if such a venture is ever undertaken. In view of the level of expenditure anticipated, why have the authors of the study apparently excluded HM Treasury from their deliberations? Could it be that this department is staffed by realists.

Surely if this country had a serious intention of joining a possible solar satellite project, some basic and obvious steps would be taken now. For instance the solar cells that turn sunlight into electricity are primarily made from silicon crystals. It is very expensive to grow these crystals on earth because an artificial vacuum is needed. For this reason one kilowatt of sunpowered electricity costs about £10,000. But if silicon crystals are grown in the permanent vacuum of space their price could come down dramatically. To test these and other theories companies in Germany and Japan have booked space on the NASA "shuttles" which start taking off next spring. The plan is to start silicon crystal growing "factories" in earth orbit by the mid-1980s. Only one company in Britain makes solar cells—Ferranti. Not only does it have no plans to book experimental space on the "shuttle" but the silicon it uses in its solar cells in Britain comes from a company in Germany.

One is left feeling somewhat bewildered as to why the Department of Industry had to commission a "study" in the first place. A few telephone calls were all that was needed to establish that Britain will never build one solar-powered satellite, let alone the dozens we would need to make a significant contribution to our future energy demands.

In any case it is unlikely that even the Americans will build one in the foreseeable future. Congress would never pass the £7bn needed to build just one station. Not, that is, until every building in the U.S. is properly insulated—surely a much better investment for them, and for us.

Paul McClory,
The Natural Energy Centre,
2, York Street, W1.

A popular cut

From the Director, British Importers Confederation

Sir,—In reporting on the proposed manpower cuts at the Departments of Trade and of Industry (August 15) reference was made to the abolition of surveillance licensing. Few people who are not directly involved in importing can appreciate the significance of their removal.

The British Importers Confederation has always opposed national surveillance licensing and has considered it to be a time-wasting and costly exercise without the merit of providing the data for which it was introduced. It was claimed that by applying for a licence, which would be granted automatically, importers of certain sensitive products would be indicating the volume of imports that might be expected to enter the UK. On various counts such reasoning is suspect and a much better barometer would be the data collected by the computers of HM Customs and Excise.

The cost of employing 20 unnecessary staff at the import licensing branch is insignificant when compared with the extra cost on the nation's import bill brought about by the need for importers to keep experienced staff engaged on unproductive work and to pay demurrage charges if the issue of licences is delayed.

Mr. Nott is to be congratulated on pinpointing an area of Government expenditure that is both unprofitable and unpopular.

E. Ira Brown,
Director.
British Importers Confederation
69 Cannon Street, EC4.

Today's Events

UK: Confederation of Shipbuilding and Engineering Unions calls national one-day strike over pay and hours.

Post Office group executive of the Society of Civil and Public Servants meets to consider pay proposals.

Industrial civil servants' unions joint meeting to discuss possible industrial action.

Postal rates rise—for inland letters (up to 60 grams) to 10p (first) and 8p (second).

Mr. Norman Lamont, Parliamentary Under-Secretary for Energy, visits UKAEA works at Windscale and Calder Hall, Cumbria.

Largest improvement action campaign in the North-west, aimed at improving the environment of Greater Manchester, announced.

First train leaves King's Cross on new Flying Scotsman service to Edinburgh—scheduled to take 4 hrs 37 mins.

The Edinburgh International Festival opens (until September 8).

Third International Conference on the Mechanical Behaviour of Materials opens at Cambridge (until August 24).

Overseas: Mr. Charan Singh, India's Prime Minister, faces vote of confidence in Parliament.

UN conference on science and technology for development, Vienna (until August 31).

World Enterprise yachting championships, Sligo, Republic of Ireland.

OFFICIAL STATISTICS

Balance of payments current account and overseas trade figures for July. Construction—new orders (June).

COMPANY RESULTS

Final dividends: Nolton. Interim dividends: Charles Baynes, Blagden and Noakes (Holdings).

COMPANY MEETINGS

See Financial Diary on page 16.

LUNCHTIME MUSIC, London

Piano recital by Geoffrey Saba, St. Lawrence Jewry next Guildhall, 1 pm.

Organ recital by David Poulter, St. Michael Cornhill, 1 pm.

Dunbee-Combex may hive off DIY side

Dunbee-Combex-Marx, the toy group whose profits fell sharply last year, is considering hiving off its do-it-yourself activities. An announcement is expected to be made at today's annual meeting. The company's DIY activities brought in trading profits of around £1m last year on sales of nearly £23m and their flotation would enable the group to raise necessary capital.

Mr. Richard Beecham, the joint managing director, declined to comment at the weekend, other than to say that "any statement we have to make will be made at the annual meeting."

On Friday, it was announced that Dunbee would be sending its shareholders a new set of 1978 accounts because errors had been found in the original version. These stemmed from the incorrect consolidation of subsidiaries, although net worth and the results are unaffected by the change.

Dunbee's pre-tax profits slumped last year from £6.4m to £1.3m, with severe losses occurring overseas, chiefly in the U.S., but also in West Germany and Australia.

Because of the rapid growth of its toy business, Dunbee has not pressed ahead with the expansion of its DIY and industrial division, for which prospects were described as "encouraging" in the annual report.

Early last year, it acquired the Decco chain of DIY wholesale cash and carry centres, the largest in the country.

It is not thought that Dunbee intends to float off any of its other activities, and there are no plans to sell the Louis Marx operations in the U.S., despite the company's recent difficulties there.

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims—Charles Baynes, Blagden and Noakes.

Finals—K. O. Boardman, Nolton.

FUTURE DATES

Interims:—

BBA	Aug. 30
Eucalyptus Pulp Mills	Aug. 31
House of Fraser	Aug. 23
Investment Trust of Guernsey	Aug. 22
Lambert Howarth	Aug. 21
Union Corporation	Aug. 28

Finals:—

Christy Brothers	†Sep. 4
Kursaal	Aug. 29
Land Investors	Sep. 7
Suter Electrical	Aug. 22

†Amended

Spillers Board says wait

Spillers has followed up its immediate rejection of last week's £73m bid from **Dalgety** with a letter to shareholders in which they are "strongly advised" to take no action until they have had their directors' comments.

The letter again says that the Spillers Board feels the offer is "unlikely to be advantageous to the company, its shareholders or its employees."

Mr. Michael Vernon, the chairman, said the Board would present its opinions after the formal offer documents have been received.

Ashley Ashwood

Sir Lindsay Alexander, chairman of Ocean Transport and Trading, which is tomorrow due to announce interim results for 1979.

London listing for Esselte

SHARES of Esselte, the Swedish office equipment, packaging, printing and publishing group, are to be quoted in London.

The company's free ordinary "A" and "B" shares, each with a nominal value of SKr 50, have been admitted to the Official List, following Esselte's 10-year $25m 7¼ per cent convertible subordinated bond issue in March.

The bonds, already listed in London, are convertible on or after September 15 this year into fully paid "B" shares at an initial conversion price of SKr 159 a share. Esselte's free ordinary shares were quoted at SKr 163.50 at the Stockholm close last Thursday.

Esselte, which paid $82m last year for Dymo Industries, the U.S. company known for its plastic labelling systems, lifted pre-tax profits from SKr 169m to SKr 231m (£24.5m) in its last financial year to March 31. Sales were up 40 per cent to SKr 3.43bn, but this included SKr 553m from 10 months of sales by Dymo. Excluding this and other acquisitions, sales were 13 per cent higher.

For 1979-80, Esselte is forecasting a further rise in turnover to SKr 4bn, an increase of 17 per cent, while pre-tax profits are expected to advance at a faster rate to around SKr 275m.

Hambros Bank and Skandinaviska Enskilda Banken are sponsors to the Esselte share introduction.

BASE LENDING RATES

A.B.N. Bank	14 %	■ Hill Samuel	§14 %
Allied Irish Bank Ltd.	14 %	C. Hoare & Co.	†14 %
Amro Bank	14 %	Julian S. Hodge	15 %
American Express Bk.	14 %	Hongkong & Shanghai	14 %
Henry Ansbacher	14 %	Industrial Bk. of Scot.	14½%
A P Bank Ltd.	14 %	Keyser Ullmann	14 %
Associates Cap. Corp.	14 %	Knowsley & Co. Ltd.	15½%
Banco de Bilbao	14 %	Lloyds Bank	14 %
Bank of Credit & Cmce.	14 %	London Mercantile	14 %
Bank of Cyprus	14 %	Edward Manson & Co.	15 %
Bank of N.S.W.	14 %	Midland Bank	14 %
Banque Belge Ltd.	14 %	■ Samuel Montagu	14 %
Banque du Rhone et de la Tamise S.A.	14½%	■ Morgan Grenfell	14 %
Barclays Bank	14 %	National Westminster	14 %
Bremar Holdings Ltd.	15 %	Norwich General Trust	14 %
Brit. Bank of Mid East	14 %	P. S. Refson & Co.	14 %
■ Brown Shipley	14 %	Rossminster	14 %
Canada Perm't Trust	14 %	Ryl. Bk. Canada (Ldn.)	14 %
Cayzer Ltd.	14 %	Schlesinger Limited	14 %
Cedar Holdings	14 %	E. S. Schwab	15 %
■ Charterhouse Japhet	14 %	Security Trust Co. Ltd.	15 %
Choulartons	14 %	Shenley Trust	16 %
C. E. Coates	14 %	Standard Chartered	14 %
Consolidated Credits	14 %	Trade Dev. Bank	14 %
Co-operative Bank	*14 %	Trustee Savings Bank	14 %
Corinthian Secs.	14 %	Twentieth Century Bk.	15 %
Credit Lyonnais	14 %	United Bank of Kuwait	14 %
The Cyprus Popular Bk.	14 %	Whiteaway Laidlaw	14½%
Duncan Lawrie	14 %	Williams & Glyn's	14 %
Eagil Trust	14 %	Yorkshire Bank	14 %
English Transcont.	14 %		
First Nat. Fin. Corp.	15½%		
First Nat. Secs. Ltd.	15½%		
■ Antony Gibbs	14 %		
Greyhound Guaranty	14 %		
Grindlays Bank	‡14 %		
■ Guinness Mahon	14 %		
■ Hambros Bank	14 %		

■ Members of the Accepting Houses Committee.
* 7-day deposits 11½%, 1-month deposits 11¾%.
† 7-day deposits on sums of £10,000 and under 11½%, up to £25,000 12% and over £25,000 12¼%.
‡ Call deposits over £1,000 11½%.
§ Demand deposits 11½%.

Siebe Gorman set for growth

THERE are clear indications that demand for the products of **Siebe Gorman Holdings** is continuing to grow both at home and overseas, Mr. G. C. D'Arcy Biss, chairman, says in his annual report.

The chairman believes that the current year "will again manifest the progress that we have all come to expect of the group."

Despite trading difficulties at home and overseas during the last part of the year to March 31, 1979, trading results before non-recurring exceptional expenditure and future provisions, show further progress and growth, and leave the group in a strong position, says the chairman.

After exceptional items of £1.14m, profits before tax for 1978-79 amounted to £3.57m compared with £4.41m. Turnover was £48.4m, against £42.6m.

Protective and safety clothing contributed (in £000s) £2,648 (£2,191) to trading profit; underwater, marine and industrial safety equipment, £1,444 (£775); fire engineering, £156 loss (£285 profit); textiles, £145 (£501); footwear, £169 (£186) and rubber and plastic components, £171 (£175).

In spite of further significant trading losses in New Zealand, the year proved to be successful in aggregate for overseas companies with the exception of Norway and Hong Kong where difficult trading conditions and disruption was caused by factory relocation.

Total overseas trading profits increased by 70 per cent, largely due to the profitable turn around and progress of James North Australia, the continued advancement in Germany and the good year experienced by the Irish company.

Elsewhere in Europe, companies in Sweden, Denmark and Switzerland continue to give a good account of themselves by maintaining market share for UK manufactured group products.

At the year end, successful negotiations were concluded with NZTS Holdings, a New Zealand group, whereby it purchased 50 per cent of the equity in James North and Sons (NZ) and undertook the day to day management responsibility by integration into their organisation.

Meeting, Winchester House, EC, September 17 at 12.30 pm.

CGFA A$6.5m Eneabba deal

Consolidated Gold Fields Australia (CGFA) and its 62 per cent-owned **Associated Minerals Consolidated** are expanding their mineral sands operations in Western Australia with the proposed purchase of **Jennings Industries'** mineral leases at Eneabba and of certain of that company's plant, equipment and facilities at Eneabba and Geraldton.

CGFA is 70 per cent owned by London's **Consolidated Gold Fields** group. Total purchase price is A$6.5m (£3.3m) with an additional A$250,000 for the purchase of certain equipment spares.

AMC already has large reserves of rutile, ilmenite and zircon in Australia and the Jennings deal is regarded as a significant step towards rationalisation of the Eneabba field—a major supplier to the world pigment industry.

CGFA will acquire the mineral leases and AMC the plant equipment and facilities.

The mineral sands industry is in a recovery phase after a period of extreme difficulties. On August 3 AMC announced profits for the year to June of A$225,000 against a loss of A$2.75m in the previous year.

Specialist insurance broker formed

Due to the continued international growth of the exhibition and conference industry and the complexities of its insurance requirements, a new insurance broking company has been formed which will specialise in this class of risk.

The new company is **Expo-Sure**, based in Shrewsbury. It was formed by its managing director, Mr. L. S. Hunt, in association with the **Wigham Poland Group**, the international insurance broker, which for many years has been closely connected with the exhibition industry. Mr. Hunt was responsible for the initial development and marketing of the Acepian Conference and Exhibition Scheme for which the new company has acquired the sole rights.

The insurance cover placed by Expo-Sure at Lloyds will cover exhibition or conference organisers, promoters and individual exhibitors, in one policy, for the insurable losses likely to occur including their contractual liabilities to hotel or venue owners.

Airfix sees upturn

Airfix Industries has a satisfactory order book and those subsidiaries with production are improving their performances, says Mr. Ralph Ehrmann, the chairman, in his annual report.

He adds that he believes the group is in a good position to deal with any problems, and should show considerable progress in the coming year. The chairman expects turnover to increase again, and he hopes margins will improve.

In the year to March 31, 1979 the company's taxable profits declined from £2.69m to £1.32m on sales ahead from £38.9m to £43.2m.

Mr. Ehrmann adds that two new export companies Crayonne in Frankfurt and Crayonne in Milan have been set up as part of their policy of product innovation and improving marketing efforts, especially overseas.

The loss at Meccano last year remained at an unacceptable level and further steps are being taken to accelerate the improvement of sales and production.

Airfix Footwear had an unsatisfactory year, says Mr. Ehrmann. Its losses were £205,000. However, current results show that the rationalisation policy will solve the problems, he adds.

Net current assets are shown as £16.8m (£14.1m). There was a net increase in bank overdraft and cash of £2.9m (£4.3m).

Meeting, company's offices, Old Court Place, W, on September 18 at noon.

SECOND BID FOR EDINBURGH ICE RINK

Edinburgh Ice Rink was on the receiving end of a second bid yesterday, with **Glasgow Leisure** offering a total of £211,000.

The bidding company is controlled by Mr. James Glasgow, a businessman, who has built up a 35.7 per cent stake in the Edinburgh company and owns curling rinks in the west of Scotland.

The bid comes as Edinburgh Ice Rink is still pondering a recent offer from Murrayfield Ice Rink. Whereas Glasgow Leisure is offering £1.60 cash for every 25p share of Edinburgh, the Murrayfield bid was three of its own £1 shares plus 50p cash for two shares in the Edinburgh concern. Taking the Murrayfield shares at par, this bid is worth just over £231,000.

Phoenix life fund rises to £17.6m

A 13 per cent rise from £15.7m to £17.6m in the value of its managed life fund the Wealth Assured Fund over the year to March 31, 1979, is reported by **Phoenix Assurance Company**. Investment income during the year amounted to £745,000, but most of the rise in value came from a £1.75m increase in unrealised appreciation of the fund's investments.

At the end of the period, 45 per cent of the portfolio was in UK equities, compared with 42 per cent at the beginning of the year. The percentage held in property was lifted from 17 per cent to over 18 per cent and the percentage in UK fixed interest increased slightly to 18 per cent. But holdings in U.S. securities were cut from 15 per cent to 9 per cent.

The investment manager reported that despite a 14 per cent rise in the Dow Jones index, adverse movements in the dollar exchange rate and the investment currency premium resulted in substantial losses for the UK investor of US securities. The fund halved its commitment to the U.S. and reinvested the sales in UK gilts in a series of deals straddling the year end. The view is still held that the US holds excellent prospects, but the quirks in the dollar premium and the future performance of sterling have resulted in adopting a defensive posture in the market.

Utac formed as holding company

Utac has been formed as the new holding company for four British-based companies — OBL International, Stereosound Productions, Charles King and Link-Hampson.

Utac's function will be to control long-term planning and financial arrangements for the group, whose interests include export management, audio equipment, motor sales and distribution, car care products and garage equipment distribution as well as agricultural equipment manufacture.

OBL has a turnover of £27m per annum (1978/9) and the other three companies have a combined turnover of some £15m.

Utac is looking to further diversify its interests by the acquisition of manufacturing companies to add to the stability and flexibility of the group as a whole, while at the same time strengthening the position of the existing group companies in its own markets.

Utac is a largely autonomous subsidiary of UTC International of Switzerland.

Share information service

The following securities have been added to the Share Information service appearing in the Financial Times:—

Modern Merchandising (Section: Overseas—New York): **Overseas Trust Bank** (Overseas—Hong Kong).

Pending dividends

	Date	Announcement last year
*Assoc. Dairies	Aug. 29	Final 0.416
*BICC	Sept. 6	Int. 2.5
BSR	Sept. 11	Int. 1.413
Babcock and Wilcox	Sept. 13	Int. 2.831
Bk. Scotland	Sept. 19	Int. 6.882
Barrow Hepburn	Aug. 16	Int. nil
*BBA Group	Aug. 30	Int. 0.8777
Bell (A.)	Sept. 14	Final 2.882
Blackwood Hodge	Sept. 5	Int. 1.3
Blue Circle	Aug. 24	Int. 3.22
Booker McConnell	Sept. 14	Int. 3.95
*Bowater	Sept. 11	Int. 4.08
British Electric Traction	Sept. 7	Final 4.096
British Petroleum	Sept. 7	Int. 7.795
British Vita	Sept. 14	Int. 1.07
Brittains	Sept. 6	Int. 0.7
Brown Boveri Kent	Sept. 21	Int. 1
Cadbury Schweppes	Sept. 7	Int. 0.95
*Carpets Int.	Sept. 12	Int. 1.575
Collins (Wm.)	Sept. 7	Int. 2.088
Costain	Sept. 7	Int. due
Croda Intl.	Sept. 14	Int. 1.081
Dalgety	Sept. 14	Final 6.832
Decca	Sept. 6	Final 8.595
Delta Metal	Sept. 21	Int. 1.82
Dutton-Forshaw	Sept. 14	Int. 1.25
Eagle Star	Sept. 20	Int. 3.35
European Ferries	Sept. 18	Int. 1.1
Expanded Metal	Sept. 19	Int. 1.75
*Fairclough Cons.	Aug. 28	Int. 1.5
*GRE	Sept. 5	Int. 4.668
*Gibbons Dudley	Sept. 13	Int. 0.74326
Guest Keen	Sept. 16	Final 5.98
Guinness Peat	Sept. 6	Final 6.0
Harris and Sheldon	Sept. 20	Int. 1.575
Harrison's Malyan Estates	Sept. 11	Sec. Int. 2.75
Hepworth Ceramic	Sept. 6	Int. 1.75
Hestair	Sept. 20	Int. 2.358
*Hoffnung (S.)	Aug. 22	Final 2.8142
*HK & Shanghai Bank	Aug. 21	Int. HK$0.20
*House of Fraser	Aug. 23	Int. 1.8665
*ICI	Aug. 23	Int. 10.6
*IMI	Aug. 28	Int. 1.675
Johnson and Firth Brown	Sept. 14	Final 3.459
Kleinwort Benson	Sept. 20	Int. 1.8
*Ladbroke	Aug. 29	Int. 3.8
Laing (J.)	Aug. 31	Int. 1

	Date	Announcement last year
*Land Investors	Sept. 7	Final 0.8
Laporte Inds.	Sept. 20	Int. 3.0217
Law Land	Sept. 19	Int. 0.5
Lead Inds.	Sept. 18	Int. 3.3
Lister	Sept. 21	Final 1
Liverpool Daily Post	Sept. 13	Int. 3.012
Lond. Merchant Secs.	Sept. 6	Final 1.187
*Low and Bonar	Sept. 17	Int. 4.0
MFI Furniture	Sept. 19	Final 1.286
Matthews Wrightson	Aug. 31	Int. 3.8853
*Metal Closures	Sept. 10	Int. 1.9
Mills and Allen Int.	Aug. 31	Final 5
*Molins	Sept. 19	Int. 2.2
*Morgan Crucible	Sept. 6	Int. 3.883
Northern Eng. Inds.	Sept. 13	Int. 2.5
Nurdin and Peacock	Sept. 5	Int. 0.87
*Ocean Transport	Aug. 21	Int. 3.9182
Oorex	Sept. 5	Int. 1.18
P & O	Sept. 6	Int. 3.0
*Pearl Assce.	Aug. 29	Int. 3.85
Phoenix Assce.	Sept. 6	Int. 5.112
Plantation Hldgs.	Sept. 20	Sec. Int. 0.402
Portals	Sept. 6	Int. 3.85
*Provident Financial	Sept. 4	Int. 1.8
*Prudential Assce.	Sept. 13	Int. 4.199
Pye	Aug. 18	Int. 1.225
Ransome Sims & Jefferies	Sept. 21	Int. 3
Raybeck	July 12	Final 2.3812
Rio Tinto-Zinc	Sept. 20	Int. 3.5
Rowntree Mackintosh	Sept. 20	Int. 4.5
Sedgwick Forbes	Aug. 24	Int. 4.0
Selectn. Tst.	Sept. 21	Int. 5
Simon Eng.	Sept. 18	Int. 3
*Slough Estates	Aug. 29	Int. 1
Stalfex Intl.	July 26	Final nil
*Steetley	Sept. 20	Int. 2.733
*Stanhouse	Aug. 23	Int. 1.826
*Sun Alliance	Sept. 5	Int. 11p
Tate & Lyle	Sept. 20	Sec. Int. 6.35
*Turner & Newall	Sept. 18	Int. 4.5p
*Union Corpn.	Aug. 28	Int. 15 cents
*Wagon Finance	Aug. 31	Int. 0.825
Ward White	Sept. 22	Int. 1.34
*Weir Group	Sept. 5	Int. 1.8634

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

Blackman & Conrad recovery continues

THE current year at **Blackman and Conrad** should be one of steady progress overshadowed by the continuing high level of interest rates and other external factors, Mr. David Alderman, the chairman, tells shareholders in his annual report.

Referring to the return to profitability in 1978-79, Mr. Alderman says that from current information, it is clear that the recovery is continuing and profits are now free from any subsidy.

In the year ended January 31, 1979, the group reported pre-tax profits of £80,664 compared with a £216,445 loss in the previous year.

While turnover was down from £9.9m to £8.07m, it was achieved by one-third less staff compared with a year ago, the chairman says.

The accounts reflect further closures of unprofitable units, also the elimination of certain unprofitable turnover. Current turnover is being maintained with staff levels continuing to be reviewed.

The objectives of the Board are to bring bank indebtedness to acceptable levels and thus reduce the impact of interest on group results as well as to maximise productivity and return to the profitability of the past from a more compact group.

Since the end of the financial year, further substantial reductions in bank borrowings have taken place and borrowings for the first time in three years are under £1m.

The sale of the Birmingham factory for some £100,000 above book value has now been completed and other satisfactory offers for surplus properties and assets are currently under negotiation, the chairman states.

The group makes children's wear, ladies' outerwear, industrial wear and casual cotton wear. Meeting, Bonnington Hotel, WC, September 10 at 11 am.

CORAL INDEX: Close: 470-475

INSURANCE BASE RATES

† Vanbrugh Guaranteed	11¼%
† Property Growth	11¼%

† Address shown under Insurance and Property Bond Table.

LOCAL AUTHORITY BOND TABLE

Authority (telephone number in parentheses)	Annual gross interest	Interest payable	Minimum sum	Life of bond
	%		£	Year
Barnsley (0226 203232)	12	½-year	250	3-5
Barnsley (0226 203232)	12½	½-year	250	6-10
Grtr. Manchester (061 247 3760)	12	½-year	1,000	2-3
Knowsley (051 548 6555)	12½	½-year	1,000	5-7
Redbridge (01-478 3020)	12	½-year	200	4-5
Redbridge (01-478 3020)	12½	½-year	200	6-7

FINANCE FOR INDUSTRY TERM DEPOSITS

Deposits of £1,000-£50,000 accepted for fixed terms of 3-10 years. Interest paid gross, half-yearly. Rates for deposits received not later than 31.8.79.

Terms (years)	3	4	5	6	7	8	9	10
Interest %	12	12	12¼	12¼	12½	12½	12½	12½

Deposits to and further information from The Chief Cashier, Finance for Industry Limited, 91 Waterloo Road, London SE1 8XP (01-928 7822, Ext. 367). Cheques payable to "Bank of England, a/c FFI." FFI is the holding company for ICFC and FCI.

CONTRACTS AND TENDERS

Rates paid W/E 19th August 1979

	Call % p.a.	7-day % p.a.
Mon.	13,850	13,955
Tues.	14,123	13,955
Wed.	14,179	13,977
Thur.	14,093	13,980
Fri./Sun.	13,730	13,961

EUROBONDS

The Association of International Bond Dealers Quotations and Yields appears monthly in the Financial Times.

It will be published in an eight-page format on the following dates in the remainder of 1979:

September 10 October 15
November 12 December 10

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INTERNATIONAL COMPANIES and FINANCE

Wheelock earns and pays more

BY PHILIP BOWRING IN HONG KONG

WHEELOCK MARDEN and Co., the large Hong Kong property, shipping and retail group, increased net profit before extraordinary items by 42 per cent to HK$122.3m (US$23.7m) in the year ending March 31. The final dividend has been increased by 1.5 cents to 15 cents making a total for the year, inclusive of a 2.5 cents bonus dividend also paid the previous year, of 22.5 cents against 17 cents for 1977-78. Extraordinary gains of HK$2.48m were also recorded, down from the previous year's HK$10.3m.

No prognosis for the current year was given, but with local consumer demand continuing at least for the time being at a high level, the group's 53 per cent owned quoted retail arm, Lane Crawford, should continue to perform well. Last year it was the main generator of increased group earnings. Its net profit was up 93 per cent to HK$41m.

Property rental income is also expected to maintain an upward path, according to analysts. However the market is treating Wheelock cautiously. At the present price of HK$3.60 the shares are yielding 6.2 per cent and selling on a little under nine times last year's earnings, in expectation that the eventual end of the consumer boom will hurt Lane Crawford, and high interest rates and world economic uncertainties will hold back shipping profits.

Exxon delays decision on Reliance Electric offer

BY STEWART FLEMING IN NEW YORK

EXXON CORPORATION is delaying a decision on whether to proceed with the purchase of Reliance Electric shares following a ruling by a U.S. District Court Judge requiring Exxon to maintain the company as a separate entity.

But Exxon, the largest U.S. oil company, stressed that it was not terminating its tender offer and said that it would be willing to accept an alternative arrangement to meet the Court's conditions. The Court has ordered another hearing on these alternatives for August 27.

Shareholders, who have already tendered around 95 per cent of Reliance stock to Exxon in response to the company's $72 a share offer, will be able to withdraw their shares from August 20, however.

At a court hearing on Friday into a Federal Trade Commission request for a preliminary injunction against the take-over, District Court Judge John Pratt said that Exxon can buy the shares.

But Judge Pratt also ordered Exxon not to take any action which would impair its ability to comply with any order which the Commission may issue requiring it to divest its stock ownership of Reliance or "its control and interest in the business and assets of Reliance or to divest Reliance as a separate independent viable enterprise."

The Judge said that the requirement for Exxon to maintain Reliance as a separate entity will stay in effect until he decides whether it would be anti-competitive if Exxon acquired these operations, and also granted non-exclusive licences to companies to make an alternating current synthesizer.

Exxon announced its plans to try and acquire Reliance in May, saying that it needed to undertake the acquisition in order to exploit its new technology, the alternating current synthesizer. The development, which economises on power in electric motors, would save the U.S. the energy equivalent of 1m barrels of oil a year by the 1990s if widely employed.

Surprise terms for Argentinian loan

By Rosemary Burr

AGENTINA's oil firm Yacimientos Petroleas Fiscales (YPF) has asked a group of six banks to raise a ten-year $250m loan. The spread is ⅝ per cent throughout with a five years' grace period.

The terms on which the mandate was awarded have come as a surprise to most bankers in the market. Recently the Argentinians have been pressing banks to extend the maturities of the country's credits to 15 years. However, market resistance to 15-year Argentinian paper and the growing difficulty for banks of placing even 12-year credits is believed to be behind this latest move back to shorter maturities.

The deal is being led by Lloyds Bank International (coordinating and running the books), Citibank (agent), Credit Lyonnais, Dai-Ichi Kangyo, Mitsubishi Bank and Swiss Bank Corporation. The funds will be used to restructure the firm's existing short-term debt.

● Eurodollar certificates of deposits issued by British-based banks rose $1.97bn in the month to July 18 to a record $32.25bn, according to Bank of England statistics.

Simultaneously, Eurocurrency deposits, including Eurodollars, of banks in Britain rose by $12.2bn in the same period to $233.67bn, after interbank deposits with other banks had been subtracted. So far this year Eurocurrency deposits have risen by 13.7 per cent or $30.6bn.

This increase has probably resulted from a rise in deposits by oil-exporting countries following the increase in oil prices this year, analysts suggest.

So far this year Eurodollar CD issues have risen by $4.4bn or 15.8 per cent.

New bank for Malaysia

BY WONG SULONG IN KUALA LUMPUR

THE MALAYSIAN Government has formed a bank to finance long term, high technology projects, which Malaysian banks and financial institutions are not in a position to undertake.

Called the Industrial Development Bank of Malaysia it is wholly Government-owned, and has an authorised capital of 100m ringgit ($46m).

Mr. Tengku Razaleigh, the Finance Minister, who announced the launching of the bank, said it would fill a gap in the country's financial structure at a time when the process of growth and modernisation was attaining a high level of technology requiring substantial amounts of permanent long term investment.

The Industrial Bank would make loans at concessionary rates to ventures at least seven years old. Initially it would concentrate on export-orientated projects, and those in the construction and shipbuilding industries.

The bank is managed by a board of four directors, two from the Treasury and two from the central bank.

Jump in export demand at GHH

BY JONATHAN CARR IN BONN

GUTEHOFFNUNGSHUETTE AKTIENVEREIN (GHH), the big West German mechanical engineering group, increased profits in the 1978-79 business year to June 30, and proposes to pay an unchanged 12 per cent dividend.

The company gives no precise profit figures in its latest letter to shareholders—and notes that costs and earnings levels differed from one sector of group activities to another.

However, the clear increase in orders and sales against the 1977-78 results graphically illustrates the strength of the West German economic upswing in general over the last year.

Overall orders for 1978-79 were up by 8.3 per cent to DM14.6bn against the previous year. Initially, the increase came from the home market, where the order intake was up by 7.7 per cent to DM7.7bn. But, at the turn of the calendar year, foreign demand picked up sharply too, and a rise of 8.9 per cent to DM6.9bn in these orders was finally recorded.

The order intake markedly exceeded sales, which rose overall by 7 per cent to DM13.3bn, based on an increase of 9 per cent abroad to DM6bn and of 5.5 per cent at home to DM7.3bn.

Orders in hand on June 30 this year were thus markedly up to DM15.3bn—a rise of 9.5 per cent on the figure for the same time last year. No less than 68.1 per cent of those orders, many of them large ones taking several years to fulfil, are for export.

ANZ scheme turned down

BY JAMES FORTH IN SYDNEY

THE PROPOSED merger between the ANZ banking group and the Bank of Adelaide has run into a hitch. The Reserve Bank recommended a merger for the Bank of Adelaide, the smallest of the major trading banks, earlier this year, because of financial difficulties being experienced by its finance company offshoot, Finance Corporation of Australia. A financial package, involving an injection of funds into the Adelaide was organised until the merger could be affected.

The Supreme Court of South Australia has upset the plans by rejecting the scheme of arrangement under which the ANZ intended to acquire the Adelaide. Sir Arthur Rymill, the chairman of the Adelaide, said that an appeal to the full supreme court would be lodged immediately. Under the scheme the ANZ would only need to call a meeting and obtain approval from 75 per cent of the shares "present and voting."

Microdata offer commences

ST. LOUIS — McDonnell Douglas Corporation said its MICD Holding has begun its offer to acquire Microdata Corporation at $32 a share.

McDonnell will purchase all shares if at least 90 per cent of Microdata common is tendered. If more than 50 per cent but less than 90 per cent is tendered, at least 45 per cent of those shares will be purchased, although McDonnell does not intend to purchase more than 50 per cent of such shares.

Reuter

Record result at Ivaco

MONTREAL — Ivaco, reported record sales and earnings for the second quarter and first half and said it has completed its offer to purchase Atlantic Steel Company of Atlanta, Georgia.

The Marieville, Quebec, integrated steel producer said second quarter earnings jumped 93 per cent to C$10.8m or C$1.12 a share, from C$5.6m, or 57 cents a share, a year earlier, on a 56 per cent. sales gain to C$105.8m from C$67.8m.

First half earnings more than doubled to C$20.3m, or C$2.09 a share, from C$9.7m, or 98 cents a share, in the 1978 period. Sales were C$196.5m, up 61 per cent from C$122.4m.

Mr. Paul Ivanier, president of Ivaco, said that the strong demand predicted earlier this year continued throughout the first half.

Sales in the third quarter have continued in an upward trend and are expected to be substantially ahead of a year earlier, Mr Ivanier said.

He also said Ivaco has completed its previously reported offer to purchase Atlantic Steel's common stock. Ivanier said Ivaco purchased about 97 per cent of the shares for a total of about U.S $50m. The acquisition brings Ivaco's annual steel-making capacity to more than 1m tons and its rolling capacity to 1.2m tons.

AP-DJ

Canadian oil merger

Francana Oil and Gas and Canadian Merrill announced that they have agreed to a plan whereby the business of Canadian Merrill would be transferred to Francana and Canadian Merrill shareholders would receive 1.9 Francana shares for each Canadian Merrill share, reports AP-DJ from Calgary.

The two companies said in March that they were studying a merger. Completion of the merger is expected by year-end.

CURRENCIES, MONEY and GOLD

Inflationary fears increase

BY COLIN MILLHAM

Inflationary trends continue to build up around the world according to the International Monetary Fund in its latest statistical summary. It is a sign of the times that inflation has increased significantly in western industrialised nations over the last few months. The U.S., France and Britain all have inflation rates of over 10 per cent, with the UK retail price index showing an annual rise of 15.6 per cent in July. Even Germany and Switzerland are suffering from rates above 4 per cent, which seems low by our standards, but as recently as May Switzerland's rise in consumer prices was only 2.9 per cent.

Much of the blame for this upward trend can be placed on the rise in oil prices, which have tended to increase the pressure on interest rates.

When raising the discount rate to 10½ per cent from 10 per cent last Thursday the U.S. Federal Reserve said the action was taken against the background of continuing strong inflationary forces. Earlier in the week attention focused on the Fed open market committee meeting, where it was decided to tighten monetary policy in increasing the target rate on Federal funds—the uncommitted reserves lent between U.S. banks.

European interest rates also tended to firm last week, but although the foreign exchange market was generally active, currency levels were quite stable.

Meanwhile the gold market seems to be totally confused. Last week the metal moved sharply between just over $290 and nearly $305, as fears about the world's economies continued to encourage buying, while at the same time it was suggested that gold may have reached its peak for the time being. In its latest monthly report the South African Chamber of Mines forecast a possible fall to $250 later this year. This brought no comfort to a market that was already hectic and very nervous.

	Aug. 17	Aug. 16
Gold Bullion (fine ounce)		
Close	$299½-300¼ (£135.0-135.4)	$297¾-298½ (£134-134.35)
Opening	$298-298¾ (£134.7-135)	$298-298¾ (£133.85-33.85)
Morning fixing	$299.70 (£134,863)	$296.50 (£132,484)
Afternoon fixing	$300.55 (£135.200)	$297.65 (£133,356)
Gold Coins, domestically		
Krugerrand	$308½-310½ (£139-140)	$306¼-308¼ (£138-139)
New Sovereigns	$79½-81½ (£35¾-36¾)	$76¼-78¼ (£34½-35½)
Old Sovereigns	$114-116 (£49-50)	$102½-104½ (£46-47)
Gold Coins, internationally		
Krugerrand	$308½-310½ (£139-140)	$306¼-308¼ (£138-139)
New Sovereigns	$79½-81½ (£35¾-36¾)	$76½-78¼ (£34½-35½)
Old Sovereigns	$114-116 (£49-50)	$102½-104½ (£45-47)
$20 Eagles	$410-415	$410-415
$10 Eagles	$232-237	$252-257
$5 Eagles	$175-180	$175-180

CURRENCY RATES

August 17	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	14	0.586139	0.622652
U.S. $	10½	1.29839	1.37965
Canadian $	11¾	1.51936	1.61240
Austria Sch	3¾	17.3666	18.4629
Belgian F	9	38.0941	40.4722
Danish K	9	6.85526	7.28389
D Mark	5	2.37720	2.52615
Guilder	8	2.61276	2.77665
French Fr.	9½	5.63252	5.67905
Lira	10½	1063.55	1129.94
Yen	5¼	[illegible]	299.551
Nrwgn. K	7	6.53450	6.94035
Spanish Pes.	8	85.7849	91.1893
Swedish Kr.	7	5.49407	5.83428
Swiss Fr.	1	2.15047	2.28609

OTHER MARKETS

August 17	£	$		£ Note Rates
Argentina Peso	3091-3111	1395-1400	Austria	29-30
Australia Dollar	1.9640-1.9680	0.8856-0.8870	Belgium	67-68
Brazil Cruzeiro	58.86-59.86	26.55-27.00	Denmark	11.65-11.80
Finland Markka	8.50-8.52	3.8320-3.8410	France	9.40-9.56
Greek Drachma	81.208-82.155	36.60-37.00	Germany	4.10-4.20
Hong Kong Dollar	11.3950-11.4280	5.1470-5.1500	Italy	1,790-1,840
Iran Rial	157.08-168.06	70-74	Japan	480-490
Kuwait Dinar (KD)	0.606-0.616	0.2761-0.2762	Netherlands	4.40-4.50
Luxembourg Frc.	65.00-65.10	29.31-29.33	Norway	11.10-11.25
Malaysia Dollar	4.7700-4.8865	2.1575-2.1585	Portugal	105-110
New Zealand Dlr.	2.1860-2.1920	0.9865-0.9880	Spain	145-146
Saudi Arab. Riyal	7.58-7.48	3.3556-3.3575	Switzerland	3.65-3.75
Singapore Dollar	4.7655-4.7830	2.1563-2.1578	United States	2.21-2.22½
Sth. African Rand	1.8475-1.8575	0.8330-0.8375	Yugoslavia	43-46

Rate given for Argentina is free rate.

THE DOLLAR SPOT AND FORWARD

Aug. 17	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	2.2060-2.2260	2.2175-2.2185	0.45-0.35c pm	2.16	1.40-1.30 pm	2.43
Ireland†	2.0515-2.0545	2.0515-2.0545	1.15-0.95 c pm	6.14	3.30-3.05 pm	6.19
Canada	1.1685-1.1701	1.1698-1.1701	0.02-0.05c dis	−0.36	0.07-0.11dis	−0.31
Nethlnd.	2.0115-2.0135	2.0115-2.0135	0.59-0.48c pm	3.22	1.28-1.18 pm	2.44
Belgium	29.285-29.36	29.34-29.36	0.5c pm-1.0 dis	−0.31	2-4 dis	−0.41
Denmark	5.2750-5.2820	5.2750-5.2765	1.30-1.80ore dis	−3.53	5.10-5.60dis	−4.06
W. Ger.	1.8290-1.8330	1.8320-1.8330	0.85-0.75pf pm	5.24	2.34-2.24 pm	5.0
Portugal	49.13-49.25	49.15-49.25	20-35c dis	−6.71	80-120 dis	−8.13
Spain	66.05-66.13	66.05-66.08	110-130c dis	−21.80	310-330ds	−19.37
Italy	817.70-819.50	817.70-818.00	0.50-1.0lire dis	−1.1	5.50-6.25 dis	−2.9
Norway	5.0290-5.0330	5.0290-5.0300	1.25-0.75ore pm	2.39	2.10-1.60 pm	1.47
France	4.2550-4.2650	4.2525-4.2650	0.13-0.08c pm	0.3	0.47-0.57dis	−0.49
Sweden	4.2265-4.2300	4.2265-4.2250	0.20ore pm-par	0.28	0.40-0.60dis	−0.47
Japan	216.85-217.40	217.20-217.40	1.10-0.95y pm	5.7	3.0-2.85 pm	5.38
Austria	13.385-13.379	13.365-13.37	6.5-6.0gro pm	5.61	16.5-15.0 pm	4.71
Switz.	1.6553-1.6585	1.6580-1.6595	1.52-1.47c pm	10.82	4.11-4.06 pm	9.85

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

THE POUND SPOT AND FORWARD

Aug. 17	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	2.2060-2.2260	2.2175-2.2185	0.45-0.35c pm	2.16	1.40-1.30 pm	2.43
Canada	2.5810-2.6060	2.5935-2.5945	0.52-0.42c pm	2.17	1.32-1.22 pm	1.96
Nethlnd.	4.43½-4.48½	4.46-4.47	2⅝-1⅞c pm	5.04	5⅞-4⅞ pm	4.82
Belgium	64.80-65.35	65.00-65.10	15-5c pm	1.84	35-25 pm	1.84
Denmark	11.66½-11.74½	11.70-11.71	¼-2¼ore dis	−1.28	3-5 dis	−1.37
Ireland	1.0770-1.0820	1.0793-1.0803	25-35p dis	−3.33	82-102 dis	−3.59
W. Ger.	4.04-4.08½	4.06⅛-4.07⅛	3-2pf pm	7.38	7⅞-6⅞ pm	7.25
Portugal	108.50-109.75	109.00-109.30	50-110c dis	−3.80	120-220 dis	−6.23
Spain	145.75-146.70	146.43-146.55	195-245c dis	−18.02	550-650dis	−16.38
Italy	1,808-1,821	1,814-1,815	2½-¼lire pm	1.16	½-2½ dis	−0.33
Norway	11.09-11.20	11.15-11.16	5-3ore pm	4.30	11½-9½ pm	0.45
France	9.40½-9.48	9.44½-9.45½	2½-1½c pm	2.54	5¼-4¼ pm	2.01
Sweden	9.33-9.41	9.37½-9.38½	2⅞-⅞ore pm	1.60	5-3 pm	1.71
Japan	478-485	481½-482½	3.35-3.05y pm	7.97	9.50-9.20 pm	7.76
Austria	29.55-29.80	29.63-29.68	23-13gro pm	7.28	38-48 pm	7.15
Switz.	3.66-3.69½	3.67½-3.68½	4¼-3¼c pm	12.23	11¼-10¼ pm	12.23

Belgian rate is for convertible francs. Financial franc 67.40-67.50c pm. Six-month forward dollar 2.62-2.52c pm, 12-month 4.65-4.55c pm.

EXCHANGE CROSS RATES

August 17	Pound Sterling	U.S. Dollar	Deutschem'k	Japan'se Yen	French Franc	Swiss Franc	Dutch Guild'r	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	2.218	4.068	482.0	9.450	3.680	4.465	1815.	2.594	65.05
U.S. Dollar	0.451	1.	1.834	217.3	4.261	1.659	2.013	818.1	1.170	29.33
Deutschemark	0.246	0.545	1.	118.5	2.323	0.905	1.098	446.1	0.638	15.99
Japanese Yen 1,000	2.075	4.602	8.439	1000.	19.61	7.635	9.265	3766.	5.382	135.0
French Franc 10	1.058	2.347	4.304	510.1	10.	3.894	4.725	1920.	2.745	68.84
Swiss Franc	0.272	0.603	1.105	131.0	2.568	1.	1.213	493.1	0.705	17.68
Dutch Guilder	0.224	0.497	0.911	108.0	2.116	0.824	1.	406.4	0.581	14.57
Italian Lira 1,000	0.551	1.222	2.242	265.6	5.208	2.028	2.461	1000.	1.430	35.85
Canadian Dollar	0.386	0.855	1.568	185.8	3.643	1.419	1.721	699.5	1.	25.01
Belgian Franc 100	1.537	3.410	6.253	741.0	14.53	5.657	6.864	2790.	3.988	100.

LONDON MONEY RATES

Aug. 17 1979	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposits	Treasury Bills ♦	Eligible Bank Bills ♦	Fine Trade Bills ♦
Overnight	—	13¾-14¼	—	—	—	13¾	13-13⅝	—	—	—
2 days notice	—	—	14-14⅛	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	13¾-14¼	14⅛-14¼	—	14½	14¼	13½	—	—	—
One month	14⅟₁₆-14⅟₁₆	14⅟₁₆-14¼	14-14¼	15-14¾	14½	14⅝	13⅞	13⅞-13¼	14⅛	14⅝
Two months	14⅛-14	14⅟₁₆-14⅟₁₆	—	14⅛-14¼	14½	—	13¾	13⅟₁₆	14⅟₁₆	14½
Three months	14⅟₁₆-13⅟₁₆	14-14⅛	14⅟₁₆-14⅛	14⅛-13⅞	14⅜	14⅝	13⅝	13⅝-13⅟₁₆	13¾	14⅝
Six months	13⅝-13¼	13⅟₁₆-13⅟₁₆	13⅝-13¼	13-13¾	13⅞	—	—	—	13⅝	14
Nine months	12¾-12⅝	12⅟₁₆-12⅞	—	13-12¾	13¼	—	—	—	—	—
One year	12⅟₁₆-12⅟₁₆	12⅟₁₆-12⅝	12⅝-12⅞	12⅛-12¼	13	—	—	—	—	—
Two years	—	—	12¾-13	—	—	—	—	—	—	—

Local authority and finance houses seven days' notice, others seven days fixed. * Long-term local authority mortgage rates nominally three years 12¾-13 per cent; four years 12¾-13 per cent; five years 12¾-13 per cent. ♦ Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 13⅝ per cent; four-month trade bills 14 per cent.

Approximate selling rate for one-month Treasury bills 13⅟₁₆ per cent; two month 13⅟₃₂ per cent; three-month 13⅟₃₂ per cent. Approximate rates for one-month bank bills 13⅟₃₂ per cent; two-month 13⅟₁₆ per cent; and three-month 13⅝ per cent; one-month trade bills 14½ per cent; two-month 14⅜ per cent; and three-month 14⅜ per cent.

Finance House Base Rates (published by the Finance Houses Association) 14 per cent from August 1, 1979. Clearing Bank Deposit Rates for small sums at seven days' notice 11½-12 per cent. Clearing Bank Rates for lending 14 per cent. Treasury Bills: Average tender rates of discount 13.2975 per cent.

MONEY RATES

NEW YORK	
Prime Rate	11.75-12
Fed Funds	11
Treasury Bills (13-week)	9.56
Treasury Bills (26-week)	9.47
GERMANY	
Discount Rate	5
Overnight Rate	6.45
One month	6.80
Three months	7.15
Six months	7.45
FRANCE	
Discount Rate	9.5
Overnight Rate	10.5
One month	10.625
Three months	10.875
Six months	10.875
JAPAN	
Discount Rate	5.25
Call (Unconditional)	6.75
Bills Discount (three-month)	7.0525

RECENT ISSUES

EQUITIES

Issue Price p	Amount Paid Up	Latest Renunc. Date	1979 High	1979 Low	Stock	Closing Price p	+ or −	Div. P. or Amount	Times Covered	Gross Yield	P.E. Ratio
**	F.P.	24/8	75	60	Arrow Chemicals	72	.....	b2.0	2.3	4.0	15.5
**	F.P.	—	88½	83	Barlow Hldgs.	86	.....	T2.6	1.1	4.3	23.9
80½	F.P.	27/7	105½	95½	Fairline Boats	102	.....	b5.2	2.5	7.3	7.3
160	F.P.	5/9	190	185	Mercantile House	190	.....	10.72	2.3	8.1	7.8
**	F.P.	10/8	37	26	Mettoy Dfd.	35	.....	—	—	—	—
¶¶	F.P.	—	37	30	St. George Assets 10p	37	.....	bd1.0	1.5	3.9	24.0
160	F.P.	8/8	198	194	Standard Tel. & Cables	194	−1	b8.0	2.1	5.9	11.7

FIXED INTEREST STOCKS

Issue Price £	Amount Paid up	Latest Renunc. Date	1979 High	1979 Low	Stock	Closing Price £	+ or −
¶91	F.P.	21/9	87	86½	Aurora 8¼ Conv. Cum. Pref.	87	.....
**	F.P.	—	103p	101p	Bradford Prop. 10½% Cum. Pref	103p	.....
100	F.P.	20/7	101¼	92	English & Overseas Inv. Conv.	93	+1
¶96½	£10	29/11	12¼	8¾	Essex Water 8% Red Pref. 1984	12¼	.....
¶¶	F.P.	—	73½	73	Lonrho 9% 2nd Mort. Deb. 87/92	73½	.....
¶¶	F.P.	—	90½	89½	Do. 12⅛% 2nd Mort. Deb. 85-90	90½	.....
¶¶	F.P.	—	99	97	Do. 12⅞% 2nd Mort. Deb. 80-83	98½	.....
97	F.P.	—	99¼	97¾	Scot. Agricultural Sec. 13% Deb. 97-99	98½	.....
100p	—	7/9	102p	100p	Stonehill 10½% Cum. Prf.	101p	.....
¶98	F.P.	24/8	101½	100½	Sund. & S. Shields Water 8% 1986	101½	+¼
¶98	£10	18/10	13¾	10½	Wrexham Water 8% 1984	13¾	+¼

"RIGHTS" OFFERS

Issue Price p	Amount Paid up	Latest Renunc. Date ●	Latest Renunc. Date ■	1979 High	1979 Low	Stock	Closing price p	+ or −
14	Nil	23/8	21/9	5pm	4pm	Abwood Machine Tools	4pm	.....
25	Nil	24/8	14/9	46pm	40pm	Bank & Commercial	46pm	+6
110	Nil	—	—	20pm	20pm	Bank Leumi	20pm	.....
A$2	Nil	—	—	49pm	37pm	Bank of New South Wales	49pm	.....
30	F.P.	3/8	24/8	41	39	Control Securities	39	.....
25	F.P.	15/8	17/8	51	38	Goodkind (W.)	45	.....
60	F.P.	3/8	7/9	82	77	Goldberg (A)	81	.....
50	F.P.	6/8	31/8	121	100	Hanson Trust	120	+1
47	F.P.	30/7	25/8	58	47½	Hargreaves	52	.....
115	F.P.	20/8	21/9	135	124	Hay's Wharf	135	.....
88	F.P.	27/7	24/8	101	91	Highland Dist.	94	−1
155	F.P.	13/7	24/8	208	182½	Holt Lloyd Intl	206	−1
10	F.P.	5/7	7/9	118	107	Intl. Timber	118	.....
130	Nil	—	—	11pm	6pm	Lennons	11pm	.....
110	Nil	—	—	12pm	10½pm	Letraset	12pm	.....
5	Nil	29/8	18/9	5pm	5pm	London Inv. Trust	5pm	.....
[illegible]	Nil	15/8	17/8	1pm	Nil	Ovenstone	Nil	.....
157	F.P.	30/7	24/8	75	60	UBM	75	+1
10	nil	—	—	2pm	1pm	Yorkgreen Invs.	1½pm	.....

Renunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimate. g Assumed dividend and yield. u Forecast dividend: cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1979. Q Gross. T Figures assumed. ‡ Cover allows for conversion of shares not now ranking for dividend or ranking only for restricted dividends. § Placing price to public. pt Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation, merger or takeover. ‖‖ Introduction. □ Issued to former preference holders. ■ Allotment letters (or fully-paid). ● Provisional or partly-paid allotment letters. ★ With warrants. †† Unlisted security. ‡‡ Issued as units comprising 2 Income shares and 10 Capital shares at 125p per unit.

Public Works Loan Board rates

Effective from August 18

Years	Quota loans repaid by EIP†	Quota loans repaid A‡	Quota loans repaid at maturity§	Non-quota loans A* repaid by EIP†	Non-quota loans A* repaid A‡	Non-quota loans A* repaid at maturity§
Up to 5	12¼	12½	12½	13⅛	13⅛	13
Over 5, up to 10	12¼	12½	12½	13	12⅞	13
Over 10, up to 15	12½	12½	12½	13	13	13
Over 15, up to 25	12½	12½	12½	13	13	13
Over 25	12½	12½	12½	13	13	13

* Non-quota loans B are 1 per cent higher in each case than non-quota loans A. † Equal instalments of principal. ‡ Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payments of interest only.

INSURANCE

Assistance business brought into the net

BY OUR INSURANCE CORRESPONDENT

BRITISH INSURERS in the past decade have had to accept an increasing degree of supervision, stemming from motor insurance failures 10 years ago, from more recent difficulties of some of the smaller newer life offices, and from Britain's membership of the Common Market. This process is by no means complete.

In July, 1973 an EEC directive, known as the non-life establishment directive, which deals with the co-ordination of laws," formulated regulations and administrative provisions relating to the taking-up and pursuit of the business of direct insurance other than life assurance.

From time to time the EEC supervisory authorities discuss how directives are operating and whether amendments are needed. In February this year they decided that a working paper should be produced on the introduction of a new class of insurance to be subject to the 1973 directive.

This new class would include what is called "assistance" business so that organisations providing assistance services would be brought into the insurance supervisory net even though they might not at present be considered to be insurers in the countries where they operate.

What then is "assistance"? Perhaps the best example here is the kind of protection provided principally by the AA and RAC in respect of breakdown. From the motorist's point of view the AA "Relay" and the RAC "Recovery" schemes are scarcely distinguishable in character from other personal insurances. The member pays a premium for promised protection and gets a contract.

But the essential difference between AA/RAC schemes and comprehensive motor and household policies is that the former are run by two motoring organisations—without the backing of the insurance market from the ground up—while the latter have to be provided by authorised insurers.

In Britain there are a number of non-insurance organisations providing "assistance" for members and others, principally in connection with motoring or tourism. On the Continent many more, all of widely differing types, provide a whole range of services.

The present notion is that each national supervisory authority should decide whether any particular "assistance" scheme should be counted as insurance within the proposed legal definition. Apart from making an objective assessment of each scheme, in borderline cases determining factors might be the scale of operations and the degree of competition with traditional insurance. However, it is not at present contemplated that manufacturers' warranties of maintenance contracts should be caught in the net.

Any assistance organisation caught by the proposed amendment to the directive would have two options. One would be to find an insurance carrier for its scheme and bring members and insurers together under some kind of group contract—perhaps an unattractive proposition as this would eliminate the organisation's direct interest in the provision of assistance while insurers would have first call on any profit that might accrue.

The alternative would be for the organisation to comply with all the appropriate detailed rules for authorisation as an insurance company, get authorisation and continue in business as before. That would be satisfactory for an organisation supplying only assistance, but not so good for one providing assistance as one of several activities.

In the latter case it would have to hive off its assistance scheme from the rest in order to get the necessary insurance authorisation. Thereafter the two distinct parts of the organisation's activities would have to stand on their individual feet for profit-and-loss purposes.

Assistance business is 99.9 per cent consumer-orientated personal lines business. It is in the personal lines area that all EEC supervisory authorities, including the Department of Trade, exercise greatest control. The proposal to bring assistance business into the insurance control net is logical. However, it is the means of practical achievement that will prove more controversial than the basic proposal itself.

APPOINTMENTS

APPOINTMENTS

Senior post at NatWest

Mr. Ben Boult, Southampton and Channel Islands area director of NATIONAL WESTMINSTER BANK, has been appointed Nottingham area director. He succeeds Mr. John Milton, who is retiring at the end of August. Mr. Roy Jones will become Southampton and Channel Islands area director.

★

Mr. T. Sanders has been appointed a director of TULLETT AND RILEY INTERNATIONAL. Mr. J. Jones and Mr. S. Witpen have been appointed directors of Tullett and Riley (foreign exchange) Co. These appointments take effect from September 1.

★

Mr. Bryan Litherland has been appointed group accountant for the BRYROB HIRE GROUP.

★

Mr. Peter Williams has been appointed general marketing manager responsible for micrographic and business communication products groups in the business products division of 3M UNITED KINGDOM.

★

Mr. W. K. Gibson, senior group industrial relations officer of Westminster Press, has been appointed assistant general manager, YORK AND COUNTY PRESS, York (a division of Westminster Press).

★

Mr. T. J. Donovan and Mr. A. J. Ramsdale will join the partnership of COLBURN, FRENCH AND KNEEN on September 1. Mr. P. N. Hulance, Mr. D. M. Kingston and Mr. J. G. Reilly will be appointed junior partners. Mr. K. L. Hare, marine claims manager, and Mr. M. V. Elton, marine servicing manager, on the same date.

★

Mr. Phillip M. Wilson, senior vice president of BANKERS TRUST COMPANY, has been appointed to head its newly formed marketing group.

★

Mr. F. W. Anderson has been appointed chief insurance manager of BRITISH AEROSPACE and becomes a director of British Aerospace (Insurance) and British Aerospace (Insurance Brokers).

★

Mr. Michael Leedham has joined DIETIKER METALS (UK) as managing director. Previously he was director and commercial manager BICC Metals.

★

Mr. W. H. Forsey has become chief general manager of THE ROYAL LONDON MUTUAL INSURANCE SOCIETY in succession to Mr. B. G. Skinner, who continues in a non-executive capacity. Mr. J. B. Knights has been appointed general manager and head of the society's field division.

★

Mr. E. Brian Bennett has been appointed a director of BANK JULIUS BAER INTERNATIONAL.

★

Mr. Derek G. Hickman is to join the TOLEMANS HOLDING COMPANY as managing director of the truck division from August 20. He was formerly with Mann Egerton.

★

Mr. Archie Thomas has been appointed director, financial systems division, of CHUBB CASH in succession to Mr. Bill Richardson, who has retired. He joins the company from Perkin-Elmer Data Systems of Slough.

★

Mr. James S. Lyon has been appointed a director and chief executive of MIL, of Wolverhampton.

★

Mr. Paddy Lynch, an executive director of the SOLICITORS' LAW STATIONERY SOCIETY, has retired.

★

Mr. Philippe Brugère-Trelat has been appointed a director of WORMS (UK), a subsidiary of Banque Worms, Paris.

★

Mr. John G. Chaplain has retired from BROWN SHIPLEY INSURANCE SERVICES for health reasons and is succeeded as chairman of the underwriting division by Mr. A. C. Yeo. Mr. R. N. Amos becomes chairman and Mr. E. Andrew, managing director, of Holmwoods and Back and Manson (Underwriting Agencies) and Mr. A. C. D. Ingleby-Mackenzie joins the Board of that company.

Miners reject a small change

DERBYSHIRE'S 12,000 miners have declined a National Coal Board offer to adjust their wages to the nearest pound to save the wages' staff from having to count pennies. Mr. Peter Heathfield, Derbyshire secretary of the National Union of Mineworkers, explained: "The lads need change in their pockets for things like collections and raffles."

WORLD STOCK MARKETS

Indices

NEW YORK—DOW JONES

	Aug. 17	Aug. 16	Aug. 15	Aug. 14	Aug. 13	Aug. 10	1979 High	1979 Low	Since Compil'n High	Since Compil'n Low
● Industr'ls	885.38	884.04	885.84	876.71	875.26	867.06	885.84 (15/8)	807.00 (27/2)	1051.70 (11/73)	41.22 (2/7/32)
H'me B'nds	85.81	85.88	85.19	85.60	85.74	85.85	86.10 (15/5)	82.82 (8/5)	—	—
Transport	268.70	268.96	271.77	268.58	268.11	264.46	271.77 (15/8)	205.78 (27/2)	279.88 (7/2/69)	12.25 (8/7/32)
Utilities	109.15	108.80	108.93	108.86	108.49	108.15	109.13 (17/8)	98.51 (15/5)	165.32 (20/4/69)	10.58 (28/4/42)
Trading Vol 000's†	31,748	47,888	45,250	41,010	41,880	36,740	—	—	—	—

● Day's high 893.60 low 878.75

Ind. div. yield %	Aug. 10	Aug. 3	July 27	Year ago (approx)
	5.64	5.75	5.76	5.26

STANDARD AND POORS

	Aug. 17	Aug. 16	Aug. 15	Aug. 14	Aug. 13	Aug. 10	1979 High	1979 Low	Since C'mpil't'n High	Since C'mpil't'n Low
‡Indust'ls	120.81	119.78	119.89	118.98	118.51	117.75	120.81 (17/8)	107.08 (27/2)	134.64 (11/1/73)	3.52 (30/6/32)
§Composite	108.50	108.88	108.25	107.52	107.42	108.48	108.50 (17/8)	96.13 (27/2)	125.85 (11/1/73)	4.40 (1/6/32)

	Aug. 15	Aug. 8	Aug. 1	Year ago (approx)
Ind. div. yield %	5.02	5.13	5.22	4.70
Ind. P/E Ratio	8.41	8.21	8.07	9.99
Lond Gov. Bond Yield	8.89	8.85	8.91	8.54

N.Y.S.E. ALL COMMON

MONTREAL

TORONTO Composite

JOHANNESBURG Gold Industrials

FRIDAY'S ACTIVE STOCKS

EUROPE

AMSTERDAM

BRUSSELS/LUXEMBOURG

SPAIN ▼

TOKYO ¶

COPENHAGEN ✱

STOCKHOLM

VIENNA

GERMANY ✦

HONG KONG

SWITZERLAND ✱

BRAZIL

MILAN

AUSTRALIA

JOHANNESBURG

OSLO

PARIS

Financial Rand U.S.$0.84 (Discount of 23½%)

WALL STREET

NEW YORK

CANADA

† Bid. ‡ Asked. § Traded. ¶ New Stock.

INTERNATIONAL BONDS

BY FRANCIS GHILES

A jaded view of the dollar

"NEVER have so many done so little for so few" was how Hill Samuel chose to sum up the situation in the Eurobond market last Friday: indeed, the second week in August may have witnessed a low in Eurobond new issue and trading activity this year.

Investors are staying away from the market, convinced that U.S. short-term interest rates still have some way to go before reaching their peak. With most European countries having taken the lead in tightening their respective monetary policies, the Federal Reserve's decision to follow suit last week a move which was widely expected, had already been discounted.

Banks feel that the U.S. authorities have taken a step in the right direction but they want to see U.S. interest rates move higher before they even consider buying dolar denominated bonds in any quantity again. Their attitude is unlikely to change dramatically even though the amount of cash at their disposal is growing.

A feature of the international bond markets which is becoming steadily more pronounced is the divergence between yields in the U.S. domestic and Eurobond markets. Such divergences have occurred in the past, not least last October, a time when non-U.S. investors had lost confidence in the dollar.

The two markets diverged again at the beginning of July and have been doing so again for the past two weeks. Yield differentials of up to 30 basis points are now available to investors who choose to buy Eurobonds rather than U.S. domestic issues.

This divorce between the two markets can be attributed to three factors: the major one is the lack of confidence in the future stability of the dollar among investors living outside the U.S. Their confidence has been so deeply eroded by events in Washington over the past 12 months that it will take more than the appointment of Mr. Paul Volcker to the Federal Reserve and the slight tightening of U.S. monetary policy initiated last week to convince them that it is safe to start buying dollar paper in any quantity.

The greater their reservations about the dollar, the stronger the rally in the New York market that is needed to win them over.

	June 14	July 2	July 16	Aug. 6	Aug. 16
GMAC 9¼ per cent Eurobond of July 1, 1986	9.50	9.55	9.62	9.78	9.83
GMAC 8¾ per cent U.S. domestic bond of June 15, 1986	9.51	9.46	9.51	9.66	9.66
PEPSI-CO 9¼ per cent Eurobond of March 1, 1984	9.48	9.72	9.66	9.80	9.73
PEPSI-CO 8¼ per cent U.S. domestic bond of Jan. 15, 1985	9.37	9.26	9.26	9.53	9.43

Bid yields on comparable U.S. domestic and Eurobonds on an annual basis.

Non-U.S. investors also take a less sanguine view than U.S. residents about the likely impact the coming recession will have on U.S. inflation rates. Nor are they convinced that the U.S. balance of trade deficit can be seriously cut in the near future.

A further factor which tends to push up the offered yields on Eurobond issues is the volume of unsold Eurobonds held by major houses in their inventories. Issues, brought to the market as far back as February are still not entirely disposed of, hence the attempt to attract investors by offering them cheaper bonds.

So long as these various factors are at work, dealers believe this hiatus between the two markets will continue.

There appears to have been switching last week from Yankee bonds into Eurobonds, particularly where French names are concerned. The recent 10 per cent Eurobond of 1984 for Michelin, in particular, is attracting investor interest as it offers a yield some 20 basis points above French Yankee bonds of similar quality.

New issue activity in the dollar sector of the Eurobond market was at a low ebb last week. No straight bond was launched for the second week running. One floating rate note, for Williams and Glyns, through Credit Commercial de France was launched, as well as what is believed to be the largest ever floating rate note certificate of deposit for Banque Nationale de Paris Ltd.: $75m for five years with an interest rate fixed at ¼ per cent above the six month Libor rate lead.

The West German Capital Markets Sub-Committee meets today. It is not expected to agree to a new issue calendar of more than DM 400-500m for the coming four weeks.

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m	Maturity	Av. life Price	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
†Citicorp	100	1983	3½	—	100	Credit Suisse First Boston	—
†Williams & Glyn's Bank	75	1991	12	5¼⊕	100	CCF	5.32⊕
††Norges Kommunalbank (g'teed Norway)	100	1999	13	*	*	Smith Barney-Harris Upham	*
D-MARKS							
‡§UNY	50	1985	—	6¼	100	Deutsche Bank	6.5
SWISS FRANCS							
‡Shikoku Elec. Power	100	1989	n.a.	4¾	100	UBS	4.75
Danish Mortgage Bank (g'teed Denmark)	80	1991	n.a.	4¾	99	Swiss Bank Corp.	4.86
New Zealand	100	1989	n.a.	4¼	99¼	Swiss Bank Corp.	4.435
†Bank Handiowy	30	1989	n.a.	5⊕	100	Banque Gutzwiller, Kurz, Bungener	5.06⊕
‡**§Toyo Soda Mnfg.	40	1984	—	4⅞	100	Crédit Suisse	4.875
‡**§Tokyo Sanyo Elec.	80	1984	—	4½	100	Swiss Bank Corp.	4.55
CANADIAN DOLLARS							
‡Credit Foncier	30	1984	5	10¼	100	Crédit Suisse First Boston, S. G. Warburg	10.375
UNITS OF ACCOUNT							
Copenhagen Cnty. Auth.	20	1991	¶	8½	*	Kreditebank Luexm.	*
KUWAITI DINARS							
Caisse Cen. de Cooperation Econ. (g'teed France)	10	1994	9.4	8	*	KIIC	*

* Not yet priced. ‡ Final terms. ** Placement. † Floating rate note. ⊕ Minimum. § Convertible. †† Registered with U.S. Securities and Exchange Commission. ¶ Purchase fund.
Note: Yields are calculated on AIBD basis.

U.S. BONDS

BY STEWART FLEMING

Pleased with Mr. Volcker

THE Federal Reserve Board fired another round at the inflationary dragon last week, tightening credit and raising its discount rate to a new record of 10½ per cent, even though the Carter Administration is officially forecasting higher unemployment and a recession.

The moves followed the regular monthly meeting of the Fed's monetary policy arm, the Federal Open Market Committee (FOMC) on Tuesday, the first since Mr. Paul Volcker succeeded Mr. G. William Miller as Fed chairman on August 6.

On Wednesday, the Central Bank signalled an increase in the average weekly target interest rate on Fed funds from 10⅝ per cent to around 11 per cent, and this was followed almost immediately by increases in commercial bank prime rates to 12 per cent. The discount rate increase followed on Thursday.

Both the U.S. bond markets, albeit in very light trading, and the foreign exchange markets, greeted the initiatives with enthusiasm. In spite of rising short term interest rates, bond prices remained firm and the dollar strengthened.

The markets had been anticipating just these steps. Indeed, had the new Fed chairman disappointed the financial markets, which had so warmly welcomed his appointment, it is more than likely that the dollar would have come under renewed pressure.

It is arguable that in the face of consumer price inflation running at over 13 per cent in the first half of the year — July's figure is due on Friday—the money supply soaring, and bank credit exploding, the Fed would have opted fo rhigher rates even with Mr. Miller still in the chair.

But the new chairman's hand seemed to be evident in the drafting of the statement which accompanied the discount rate increase. Whereas in July when the discount rate was increased, the Fed's explanation focused on the need to defend the dollar, this time the Fed's statement made no comment on the continuing threat to the dollar.

It focused instead on inflation and monetary growth as the reasons for the action. Mr. Volcker no doubt sees these as the fundamental economic problems which need to be tackled, and the performance of the dollar largely as a symptom of the failure so far to tackle them adequately.

The Fed's moves have reinforced the markets in their belief that Mr. Volcker will be more willing than his predecessor appeared to be to take the initiative in fighting inflation rather than waiting until the markets forced an official response. So, the chances of recession have been enhanced since the Fed is unlikely to shrink from further actions of necessary, even if the economy is weakening.

There are many on Wall Street who fear that further steps will be needed. Since the end of June, many short term interest rates have, it is true, risen almost a full percentage point. One month commercial paper is currently standing at 10.50 per cent against 9.63 per cent then, according to Salomon Brothers, and three month bank certificates of deposit at 10.70 per cent by the end of last week compared with 9.80 per cent at the end of June. And the prime rate is back to the record 12 per cent hit in September, 1974.

But credit remains readily available at the commercial banks, although some banks are concerned about the impact on their customers finances of the long period of high interest rates now being experienced. For the sake of comparison, however, in the midst of the 1974 credit squeeze, the Fed funds rate peaked at 13.75 per cent.

INTERNATIONAL LOANS

BY NICHOLAS COLCHESTER

Syndicated lending vindicated

IS A syndicated loan still a paying proposition? The latest analysis from Euromoney shows that in the first six months of 1979 the average spread on new loans was 0.956 per cent and the average maturity 8.3 years—a deterioration from the average figures for 1978 of 1.242 per cent over seven years.

Setting the costs of the funded and capital elements of a loan, and the cost of risk, against the interest and fees received, minus costs, leaves the hieroglyphic formula shown in the inset. It is a simplistic calculation and serves only to put current loan terms into some sort of perspective.

It assumes that the cost of funds is $\frac{1}{16}$ per cent below LIBOR, and that the front-end fee is ¾ per cent annualised over eight years. There are two even greater approximations. I have adopted the cost-or-risk of 0.33 per cent per year suggested by Governor Wallich of the U.S. Fed. After consulting various bankers I have, in cavalier fashion, knocked 0.15 per cent off the spread to pay for management costs.

On this very general basis the answer to the opening question is: yes. Two developments have helped. The formula shows that the return on equity is directly proportional to the gearing ratio adopted by banks. The return is also, curiously, affected by the LIBOR rate. The reason for this is that the higher the LIBOR rate the less burdensome becomes the small portion of each loan which is funded out of capital.

Bankers confirm that the gearing ratio has become steadily larger. I have assumed 25 to 1 for U.S. banks and 33 to 1 for European banks and even these are probably conservative. This immediately lowers the acceptable spread. Equally LIBOR has been rising relative to the acceptable return on capital employed. It is now about 11.5 per cent.

The end result is that Euromoney's average syndicated loan would currently yield a U.S. bank about 27.5 per cent on capital before tax. This implies an after tax return of about 14 per cent which would be considered prefectly adequate back on Wall Street.

Euromoney's analysis shows up National Westminster as one of this year's fine pricers with a spread averaging 0.677 per cent over 8.6 years. Such terms would be tough going for a U.S. bank, but gearing could make them more acceptable to an English one. Assuming a 3 per cent capital component, Natwest's spread still produces an estimated pre-tax return on capital of 23.3 per cent.

Return on equity formula

$$R = k[i + s + 0.1 - (1 - 1/k)(i - \tfrac{1}{16}) - L]$$

where R is return on equity

k is required ratio of earnings assets to equity.

i is LIBOR.

s is the spread (less management costs).

L is annual provision against loan loss.

0.1 is the ¾ per cent front-end fee annualised over eight years.

In considering loans made at spreads of around ½ per cent the Wallich risk factor probably has to be abandoned. If the French finance ministry were to persuade a group of U.S. banks that a loan to Electricite de France was riskless then a spread of ⅜ per cent would produce a pre-tax return on capital of 24 per cent. Even on the basis of such trust this is approaching the American lower limit: a spread of ⅜ per cent looks well beyond the pale.

A highly geared bank making optimistic assumptions can probably just make a loan pay with a spread below ½ per cent, but the buck clearly stops at around this level. The interesting message in Euromoney's presentation is that spreads are bunching up at current low levels and that the deterioration and variation in lending terms is now much more a question of maturity, with averages for different banks stretching all the way from 4 to 12 years. Morgan

The reason for the trend towards longer maturities is probably that the cost to the lender of this concession is far less tangible than a spread reduction. In the equation of annual return, an extended maturity shows up as a slight dilution of the annualised front-end fee and an imponderable increase in the notional cost of risk. It also marginally increases the cost of the bank's funds because the bank is more likely to issue Floating Rate Notes to limit the maturity mismatch of its loan portfolio.

But by and large, because of its "roll-over" nature, a floating rate syndicated loan is an extensible financing instrument to which new sections can be bolted on at will. The prospective profit remains largely unchanged, but the act of faith becomes more and more impressive.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

DEUTSCHE MARK STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

SWISS FRANC STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

YEN STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

OTHER STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						
Finance for Ind. 13 91 £	15	103	103¾	+0⅛	+0½	12.40
Fin. for Ind. 12½ 89 £	30	100¾	101¼	+0⅛	+0¼	12.31
Gen. Elec. Co. 12½ 89 £	50	101¼	101¾	0	+0¼	12.19
Indonesia 8¾ 91 KD	7	†97¾	98¼	0	−0⅛	9.03
Mitsubishi 7½ 84 KD	10	†97½	98½	0	0	8.03
Norges Kom. 7½ 89 KD	12	†96½	97	0	−0⅛	7.98
Occidental 8½ 91 KD	7	†95⅞	96½	0	−0¼	8.78
Euratom 8 87 LuxFr	500	96⅞	97⅛	+0¼	−0⅛	8.61
Norges Kom. 8 86 LuxFr	500	95⅞	96⅜	−0⅛	0	8.73
Oslo, City of 8 89 LuxFr	500	97⅞	98⅜	+0¼	+0⅛	8.36
Solvay Fin. 8 85 LuxFr	500	96⅞	97⅝	−0¼	+0⅛	8.08

FLOATING RATE NOTES

	Spread	Bid	Offer	C.dte	C.cpn	C.yld
BFG Fin. Co. 5½ 89	0¼	98½	99	11/1	11	11.14
BNDE 6 89	0¼	96½	96⅞	21/9	11⅛	11.51
Banco di Roma Int. 6 87	0¼	98½	99	20/10	11.19	11.33
Bco. Nac. Argent. 7 86	0¼	97⅝	98¼	22/9	11½	11.75
Banco Prov. BA 7⅛ 86	0¼	98⅝	98⅞	12/6	11	11.15
Banco Urquijo 6 86	0¼	97⅞	98⅜	21/9	11⅜	11.72
Bank of Tokyo 5½ 93	0¼	98½	99¼	18/10	11⅜	11.88
Bq. Ext. d'Alg. 7½ 85	0¼	95⅞	96⅛	2/11	11⅞	12.42
Bque. Indo Suez 5¾ 89	0¼	98⅜	98⅞	11/1	11	11.15
Banque Sudameris 6 87	0¼	97⅛	97⅞	11/1	11⅛	11.41
BNP 5½ 91	0¼	98⅞	99⅜	22/2	11⅛	11.48
Citicorp O/S Fin. 6 94	‡0¼	99½	100	8/9	10.69	10.71
Creditanstalt 5½ 91	‡0¼	98¼	98¾	14/9	10⅞	11.04
GZB 5½ 89	‡0¼	98⅝	99⅛	1/11	11.44	11.57
Gotabanken 6 88	0¼	98⅝	99⅛	15/6	11½	11.62
Ind. Bk. Japan 5½ 85	0¼	99½	100	1/12	10.94	10.97
Jugobanka 8 88	0⅞	95⅜	95⅞	23/11	11⅞	12.35
LTCB Japan 5¼ 85	0¼	99¾	100¼	9/10	11⅜	11.63
LTCB Japan 5½ 89	0¼	98¾	99¼	7/12	11⅛	11.24
Mfrs. Han. O/S 5¾ 94	‡0¼	[illegible]	99¼	23/8	11.19	11.24
Nacional Fin. 6¾ 86	0¼	98⅛	98⅝	25/1	11½	11.69
Nat. West. 5¾ 94	0¼	98¾	99¼	11/10	11	11.17
Nippon Credit Bk. 5½ 85	0¼	99⅜	99⅞	22/12	10.94	10.99
Nippon Credit Bk. 5½ 86	0¼	98¼	98¾	12/1	10⅞	11.04
Petro Mexicano 7 84	0¾	99½	100	24/1	11.44	11.48
Privredna Banka 8 86	0⅞	95⅜	95⅞	20/12	11.58	12.05
Royal Bank Scot. 5¾ 94	‡0¼	98⅞	99⅜	11/10	11	11.13
Sogenal 5¾ 89	0¼	98	98½	11/1	10.94	11.13
Texas Int. Airways 7 86	‡0½	96½	97	11/10	11.56	11.95
TVO Pwr. 9 91 (D-lock)	0¼	97¾	98¼	24/11	11½	11.37
Utd. Overseas Bk. 6 89	‡0¼	97⅞	98⅜	29/9	11.14	11.38
Bq. E. d'Alg. 4¾ 89 SF	0¼	96⅞	97⅜	18/12	4¾	4.38

CONVERTIBLE BONDS

	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
AGA Akt'bolag 7¾ 89	10/79	174	95¾	96¼	−0¼	−4.98
Ciba-Geigy O/S F. 4 94	9/79	675	85½	86½	−0¼	4.01
Credit Suisse 4¾ 93	10/79	1325	108¼	108⅞	−0⅛	4.39
Esselte 7¾ 89	9/79	159	98¾	99¾	0	−6.52
Honda Motor 5½ 89	6/79	532	100¾	101¼	−0⅛	0.01
LPC International 8 89	9/79	35	†102½	103	−0⅛	16.01
Nitto Elec. Ind. 6 94	7/79	735	87⅞	88¼	−0⅛	3.95
Union Bk. Switz. 5 89	2/80	1250	108½	109¾	+0¼	−31.52
Fujitsu 5 84 DM	7/79	475	103¾	104¼	+0⅛	18.98
Kansai Elec. 4 84 DM	4/79	1350	88¼	89¼	−0⅛	50.95
Marudai Food 3½ 85 DM	2/79	1033	83¾	84¾	0	49.23
Nippon Ysn. 3½ 85 DM	1/79	257	111¼	111⅞	−0¼	−2.83
Nissan Diesl. 3½ 86 DM	2/79	477	87¼	88½	−0⅛	19.57
Olymp. Opt. 3½ 85 DM	2/79	703	96⅛	97¼	+0½	1.91
Sharp Cpn. 3½ 88 DM	2/79	487	91¼	91⅞	0	10.53
Tokyo Elec. 3½ 87 DM	4/79	478	93¾	94½	+0¼	42.95
Tokyu Ld. Cp. 4 86 DM	4/79	493	83⅞	84⅞	0	24.29

BONDTRADE INDEX AND YIELD

	Medium term		Long term	
Aug. 17 ...	94.74	8.85	88.79	9.61
Aug. 10 ...	94.72	8.84	88.30	9.61
High '79 ...	95.75	(1/2)	89.99	(30/1)
Low '79 ...	94.40	(11/1)	88.29	(17/8)

EUROBOND TURNOVER
(nominal value in $m)

	Cedel	Euroclear
U.S. $ bonds		
Last week	536.3	1,450.1
Previous week ...	806.2	1,345.0
Other bonds		
Last week	229.7	368.5
Previous week ...	346.2	320.7

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month) for U.S. dollars. C.cpn=The current coupon. C.yld=The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Arab Company for Trading Securities SAK: Kredietbank NV; Credit Commercial de France; Credit Lyonnais; E. F. Hutton Services SARL; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bankers Trust International; Bondtrade; Banque Française de Crédit International; Citicorp International Bank; Daiwa Europe NV; Deltec Trading Company; Dillon, Read Overseas Corporation; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nesbitt Thomson; Salomon Brothers International; Samuel Montagu and Co.; Scandinavian Bank; Strauss Turnbull and Co., Sumitomo Finance International; S. G. Warburg and Co.; Wood Gundy.

Closing prices on August 17

FT SURVEY OF CONSUMER CONFIDENCE

Pessimism deepens over economic prospects

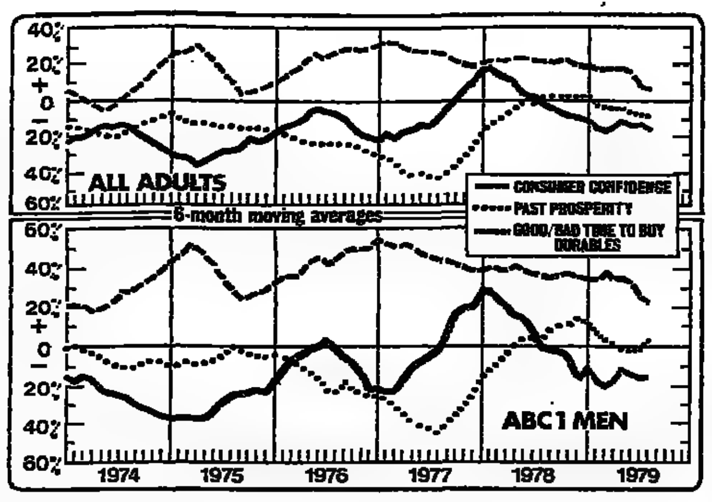
BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

A FURTHER FALL in confidence in the economy was recorded in the latest Financial Times survey of consumer confidence, published today.

The decline follows a sharp fall in confidence after the Budget. Consumers' concern over rising prices is again the main reason for pessimism.

The survey showed that 47 per cent of consumers believed conditions would worsen, an increase of 3 per cent over last month. The same proportion as last month, 15 per cent, thought conditions would improve.

This gives an index of minus 32 per cent, compared with minus 29 per cent in each of the previous two months. At the time of the general election in May, the index stood at plus 9 per cent. A year ago it stood at zero.



The steep fall in consumer confidence since the Budget is reflected in the decline in the six-monthly average, which reflects the trend rather than recording monthly fluctuations. This had recovered from minus 18 per cent in March—a result of the industrial unrest last winter—to minus 11 per cent in May after the boost given by the general election. But in August it has declined by two percentage points to minus 16 per cent.

Energy

The main reason for pessimism was rising prices, cited by four out of ten pessimists in the survey. Last month 48 per cent gave this reason. More consumers gave the Government's economic policies as a reason for pessimism—30 per cent, compared with 19 per cent last month.

Consumer concern over the energy crisis — especially the petrol situation — has eased sharply, being pinpointed by only 7 per cent of the survey, against 15 per cent last month.

Of the 15 per cent of consumers surveyed who remain optimistic, half gave the Government's policies as the main reason for optimism. A quarter gave the reason that "things must improve."

Analysis of the survey by social sub-groups shows clearly that the decline in confidence is almost entirely accounted for by C2DE men (manual workers). Their confidence has dropped 13 per centage points to minus 45 per cent.

The index for ABC1 men (professional and executive) has increased 9 per cent from last month's all-time low of minus 28 per cent. Men in both social grades are now noticeably more pessimistic than women.

Those between 35 and 54 are the only age group to have increased their confidence. The overall picture by age shows very little variation—minus 32 per cent for the under 34s; minus 30 per cent for the 35-54s and minus 33 per cent for the 55s and over.

On a regional basis, Scotland has the lowest level of future confidence, while London and the South has the highest but the difference between the two areas is not as marked as in the past.

Prosperity

The index of past prosperity also fell in August after a slight recovery last month. The survey showed 27 per cent of consumers feeling better off than a year ago, while 41 per cent felt worse off. This gave an index of minus 14 per cent.

Again, it is the ABC-1 men subgroup which considers its families better off than last year, although their index has dropped 4 points to plus 4 per cent.

Although ABC1 women still feel their families to be worse of overall, their index has increased nine points to minus 4 per cent.

The survey showed that consumers are getting more used to the higher prices of consumer durables following the value-added tax increases in the Budget. In August, 35 per cent of the survey—up from 26 per cent last month—felt that now was a good time to buy "big things for the house." The proportion thinking it a bad time fell from 43 to 39 per cent. This gives an index of minus 4 per cent, compared with minus 17 per cent last month. Before the Budget, the index stood at plus 25 per cent.

Concern over unemployment continues to rise, according to the survey. Some 47 per cent of the survey expects unemployment to rise, while 9 per cent think it will fall. This gives an index of plus 38 per cent—compared with 33 per cent last month—and means the index is at its highest for nearly four years.

The Financial Times survey of consumer confidence was carried out between August 2 and 8 by the British Market Research Bureau on behalf of the Financial Times. A total of 1,039 adults was interviewed.

CONTRACTS

£10m building orders for Moss

WILLIAM MOSS (CONSTRUCTION), part of the William Moss Group, has received orders worth more than £10m. The largest is a construction contract worth £2.25m placed by Deacon Development and Finance for warehouse units at Newton-le-Willows. Moss has also been given work valued at £1.5m for NAAFI, Kennington Lane, London, while two contracts worth £1.9m each have been received from Milton Keynes Development Corporation and Raglan Housing Association, Loughborough, for advanced factory units and flats, respectively.

★

BORDER ENGINEERING CONTRACTORS, a member of the London and Northern Group, has been awarded contracts worth over £3.25m. These include the construction of an effluent treatment works and pumping station at Workington and the provision of a water supply system for Thames Board Mills and the construction of a reinforced rock store for Albright and Wilson.

★

CROSBY DOORS, a member of the Montague L. Meyer Group, has placed a £3m contract for the construction of its new European distribution centre at Swindon. Groundworks have been let to Rush and Tompkins (Parsons) and the steel frame and cladding to Conder Midlands.

★

CHLORIDE has been awarded a contract worth more than £2m by the Soviet foreign trade organisation, Metallurgimport, is part of a factory project to it part of a factory project to manufacture batteries for cars and commercial vehicles.

★

SHEPHERD ENGINEERING SERVICES has been awarded contracts worth more than £2m. The largest is a £1.5m order for all mechanical services and air conditioning in the Halifax Building Society's extended computer building at its Halifax headquarters. Work is due to start in October.

★

R. BLACKETT CHARLTON (VESSELS), a member of the BTR Group, has been awarded a contract worth £1.3m for pipe fabrication work on an emergency support vessel. The contract is for Scott Lithgow in Port Glasgow, which is building the vessel for BP.

★

The £500,000 main contract for construction of a new banana terminal being provided by the British Transport Docks Board at the port of Newport, Gwent, has been awarded to GEORGE WIMPEY. Work is due for completion by the end of February, 1980.

★

The Link-Miles division of Singer (UK) has ordered seven Systems 32/77 computers, valued at over $1m (£448,000), from SEL COMPUTERS. The computers will be used on Singer AST (advanced simulation technology) flight simulation trainers.

★

WHESSOE (IRELAND) has been awarded a £400,000 contract by Alumina Contractors to design and build 18 storage units for the Aughinish alumina project on the Shannon estuary in County Limerick.

★

Brush Electrical Machines has placed an order worth about £50,000 with FILTERMIST for 70 oil mist filtration units. The units are being fitted to turbine driven turbo-generators, which Brush Electrical is supplying to John Brown Engineering Gas Turbines.

★

HENRY SIMON has signed a £500,000 contract with Moulins Badre to equip a new flour and semolina mill to be built at Kenitra in Morocco. The mill will have a capacity of 120 tons of wheat a day and is scheduled for completion in the latter half of 1980.

★

The FERRANTI COMPUTER SYSTEMS has supplied a dual Argus multi-access minicomputer system valued at £100,000 to the Ministry of Defence. The system has been installed at the MoD's defence automatic data processing training centre at Blandford, Dorset, where it will provide advanced training for officers and senior NCO's from the armed forces and personnel from the Civil Service.

★

ELLIOTT GROUP OF PETERBOROUGH has won contracts worth £455,000. P.S.A. Contracts has placed an order of £175,000 for design, development and construction of a Mess at Altcar training camp. SEGAS has signed a contract for distribution offices and a canteen at Mitchum at a cost of £100,000 and the Metropolitan Police are spending £46,000 on the construction of temporary premises at Bexleyheath police station. Elliott has also received classroom orders from North Yorks. C.C., Hereford and Worcester C.C. and East Sussex C.C. worth £134,000.

★

The pipelines division of the PLASTIC CONSTRUCTIONS GROUP has received an order worth around £800,000 from Lilley Construction. Plastic Constructions has been subcontracted to supply and on-site weld 3,000 metres of high density polyethylene pipe and fabricate and supply 20 spirally wound HDPE manholes for installation at 100 metre centres.

★

JOHNSON CONSTRUCTION, a member of the J. B. Holdings Group, has been awarded a £750,000 contract by B. and G. Hydraulics to build a new 43,000 sq ft factory with offices at Dominion Way, Worthing. Work on site will commence on September 3.

★

BAKER PERKINS has been awarded a £600,000 contract by United Biscuits (Foods) for an automatic bulk handling system. The order includes nine silos. Seven of these are of 60 ton capacity, six for flours and one for wheatmeal. The remainder are 35 ton apiece and will store sugar.

★

BOC GAS EQUIPMENT has won an order worth more than £300,000 from British Rail for the supply of flashback arrestors and associated testing rigs for use with oxy-acetylene cutting and welding equipment. Ten sets of testing equipment will also be supplied and set up in British Rail workshops to ensure that the flashback arrestors can be tested quckly and accurately.

★

A WELLMAN INCANDESCENT furnace ordered by the Ford Motor Company has the capacity to double the rate at which camshafts are being processed for automobile engines at the Dagenham, Essex, engine plant. The £200,000 contract is for a highly mechanised salt bath furnace installation for surface hardening.

★

Two GEC companies, GEC TELECOMMUNICATIONS and TELEPHONE CABLES have won contracts totalling £2.6m the Post Office for the supply and installation of the first long-distance optical fibre communications systems in the UK. Total route length from GEC will be 179 kilometres, and the cables will contain 1,432 kilometres of fibre. Among them will be a connection between London and Reading carrying 1,920 speech channels.

★

Dredger buckets and tumblers worth over £500,000 have been ordered from O. H. STEEL FOUNDERS AND ENGINEERS, Sheffield. The order has been placed by Mining and Transport Engineering BV, Amsterdam, which is constructing three dredgers to be used for gold-mining in Heilungkiang, the most northerly province of China. Each dredger will be equipped with 75 buckets of 300 litres capacity, and will dig at a depth of 11 metres.

★

Valued at £500,000 the first colour studio equipment to be used in the island of Antigua will be supplied by PYE TVT. The contract includes vision mixing, telecine equipment, and an electronic news gathering camera.

The company is supplying 50 11-inch illuminant "D" phospor tube monochrome monitors for the BBC's outside broadcast vehicles, at a cost of £26,750.

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	International Craft and Hobby Fair (04252 72711) (until August 23)	Wembley Conference Centre
Aug. 21—23	Education and Communication Technology Exhibition (01-722 4139)	Holland Park School
Aug. 25—Sept. 1	International Motor Cycle Show (01-741 2156)	Earls Court
Sept. 2—6	Giftware and Fashion Accessories Trade Fair (Tunbridge Wells 36685)	Bristol Exbn. Centre
Sept. 3—7	International Music Publishing and Recording Industry Show—INTERPOP (01-486 0059)	Connaught Rooms, London
Sept. 3—7	Offshore Europe Exhibition and Conference (01-549 5831)	Aberdeen
Sept. 4—6	Point-of-Sale Exhibition (01-340 3291)	West Centre Hotel, London
Sept. 4—7	International Carpet Fair (021-705 6707)	Harrogate
Sept. 4—7	International Inplant Printing Show—REPRO. WORKSHOP (01-647 1001)	Wembley Conference Centre
Sept. 6—8	Business and Light Aviation Show (01-261 8437)	Cranfield Airfield, Beds.
Sept. 11—22	Chelsea Antiques Fair (0727 56069)	Chelsea Old Town Hall
Sept. 11—13	Electronics Show (08833 4371)	Bristol Exhibition Centre
Sept. 16—19	MAB. '79—International Menswear Fair (01-839 5041)	Earls Court
Sept. 17—20	Filtech/Dustex '79—2nd World Filtration Exhibition (01-236 0911)	Olympia
Sept. 18—21	Firetech '79 International Fire Protection and Control Exhibition (01-637 2400)	Brighton Exbn. Centre
Sept. 24—26	Weightech '79 (01-686 5741)	Metropole Ex. Centre Brighton
Sept. 24—28	International Welding and Metal Fabrication Exhb. (021-705 6707)	National Exhibition Centre Birmingham

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Current	International Trade Fair (01-486 1951) (until Sept. 28)	Malmo
Current	International Fair (until Sept. 1)	Izmir
Current	International Packaging and Food Processing Exhibition—PAKPROCESS (01-486 1951) (until Aug. 24)	Johannesburg
Aug. 24—Sept. 2	International Radio and TV Exbn. (01-540 1101)	Berlin
Aug. 26—27	Zuspa: International Shoe Samples Fair	Frankfurt
Aug. 26—29	International Fair (01-734 0543)	Johannesburg
Aug. 26—29	International Fair (01-734 0543)	Frankfurt
Aug. 27—30	Pharmaceutical and Chemist Supplies Exhibition (01-486 1951)	Utrecht
Aug. 28—31	Electrical and Electronics Components Exhibition	Gothenburg
Aug. 29—Sept. 12	Timber and Woodworking Industry Exhibition	Moscow
Aug. 31—Sept. 9	International Fair of Consumer Goods (01-874 6034)	Stockholm
Sept. 2—9	International Autumn Fair (01-493 3111)	Leipzig
Sept. 3—10	International Trade Fair	Plovdiv
Sept. 6—21	International Fair of Algiers	Algiers
Sept. 8—11	Technical Trade Expo (01-242 4784)	Cairo
Sept. 8—11	International Leather Week (01-439 3964)	Paris
Sept. 8—16	International Autumn Fair (01-584 6938)	Vienna
Sept. 8—23	International Fair	Ghent
Sept. 12—20	International Engineering Fair (01-278 0281)	Brno
Sept. 13—16	International DIY Trade Fair (01-236 0911)	Essen
Sept. 14—23	International Autumn Fair (01-486 1951)	Zagreb
Sept. 16—19	LIGAM—Furniture Trade Fair	Berne
Sept. 16—19	Clothing Fair	Brussels

BUSINESS AND MANAGEMENT CONFERENCES

Aug. 27—Sept. 2	Orb Foundation: Trade and Technology in Orbit (01-836 4688)	Wembley Conference Centre
Sept. 3—7	Brunel Management Prog.: Production Management and Human Behaviour (Uxbridge 56461)	Brunel University
Sept. 6—7	MSS. Management Skills for Women (Lincoln 38529)	Lincoln
Sept. 10—12	EMS: The Japanese Approach to Product Quality Management (High Wycombe 33171)	Institute of Directors, Pall Mall
Sept. 11—12	Freight Information Services: Practical Marketing for Road Hauliers (Southport 38515)	Southport
Sept. 11—12	ASUAG: International Chronometry Congress (01-387 0116)	Geneva
Sept. 12—13	Financial Times: Korea in the 1980s (01-236 4382)	Seoul
Sept. 12—15	International Newspaper Promotion Association: 9th European Conference	Munich
Sept. 13—14	Society of Chemical Industry: Marine Corrosion on Offshore Structures	University of Aberdeen
Sept. 14	CILA: Educational Conference (01-240 1496)	Frankfurt
Sept. 14	MSS Computer and Business Consultancy: Effective Budgeting and Financial Planning (Worthing 34755)	Royal Lancaster Hotel, W2 London
Sept. 18—21	Brunel Management: Experimental Methods in Management Training (Uxbridge 56461)	Brunel University
Sept. 18—21	ICMA: Decision Making Techniques for the Management Accountant (01-637 2311)	University of Technology, Loughborough
Sept. 17—18	Management Centre Europe: Top Management Forum	Monte Carlo
Sept. 17	CCC: Tax Planning and the Boat Owner—How to Reduce Costs (01-222 6362)	Cotswold Hotel, Southampton

WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The Board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY, AUGUST 20

هكذامن الأصل

AUTHORISED UNIT TRUSTS

INSURANCE & PROPERTY BONDS

OFFSHORE & O'SEAS FUNDS

NOTES

FT SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

Five to Fifteen Years

Over Fifteen Years

Undated

INTERNATIONAL BANK

CORPORATION LOANS

COMMONWEALTH & AFRICAN LOANS

LOANS

Public Board and Ind.

1J	1J	Agric. Mt. 5pc '59-89	66½	16	7.58	10.65
30J	31D	Alcan 10½pc '89-94	86	21.5	12.70	12.91
1M	1S	Met. Wtr. 3pc 'B'	28½xd	18	10.46	12.38
30J	31D	U.S.M.C. 9pc 1982	121	21.5	7.57	—
30J	31D	Do. without Warrants	90½	21.5	10.19	13.90

Financial

30J	30J	FFI 13pc 1981	100½	27	12.94	12.54
15M	15N	Do. 14pc '79	101	9.4	14.24	—
20J	20D	Do. 14pc '83	104¼	21.5	13.44	12.66
31 Mr	30 S	ICFC 5½pc Deb. '80-82	83½xd	13.8	6.58	11.90
31My	30N	Do. 6¼pcDb. '81-84	79½	23.4	8.04	12.10
11J	11J	Do. 10½pc Uns.Ln. '86	93	4.6	11.46	12.40
11J	11J	Do. 11pc Uns.Ln. '88	95	4.6	11.51	12.10
11J	11J	Do. 11¾pc Uns.Ln. '90	96½	4.6	12.35	12.60
30 Je	31 D	Do. 7¼pcADeb. '89-92	67	4.6	11.12	12.80
31Mr	30S	Do. 7¼pcA Db. '91-94	64xd	13.8	11.32	12.70
31Mr	30S	Do. 9pc'A' '91-94	75½xd	13.8	11.92	12.70
28F	31A	Do. 8⅞pcLn. '92-97	72½xd	16.7	12.24	12.70
—		Do. 12pc. Uns. Ln. 1992	98½xd	—	12.69	12.70

FOREIGN BONDS & RAILS

AMERICANS

S.E. List Premium 13⅝% (based on US$2.2228 per £)
Conversion factor 0.8844 (0.8805)

CANADIANS

S.E. List Premium 13% (based on 2.6006 per £)

BANKS AND HIRE PURCHASE

BANKS & HP—Continued

Hire Purchase, etc.

BEERS, WINES AND SPIRITS

BUILDING INDUSTRY, TIMBER AND ROADS

CHEMICALS, PLASTICS

CHEMICALS, PLASTICS—Cont.

DRAPERY AND STORES

ELECTRICALS

ENGINEERING MACHINE TOOLS

ENGINEERING—Continued

FOOD, GROCERIES, ETC.

FOOD, GROCERIES—Cont.

HOTELS AND CATERERS

INDUSTRIALS (Miscel.)

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INDUSTRIALS—Continued

INSURANCE—Continued

PROPERTY—Continued

INVESTMENT TRUSTS—Cont.

FINANCE, LAND—Continued

MINES—Continued

AUSTRALIAN

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—		Acmex	12	—	—	—	—
—		ACM 20c	10	—	—	—	—
Nov.	Apr.	Bougainville 50 Toea	130	14.5	†Q15c	1.0	6.1
—		BH South 50c	111	974	—	—	—
—		Central Pacific	780	—	—	—	—
Oct.	May	Conzinc Riotinto 50c.	216	14.3	NQ10c	2.0	2.4
—		Cultus Pacific N.L.	19	—	—	—	—
—		Eagle Corp. 10c	9½	—	—	—	—
—		Endeavour 20c	14½	—	—	—	—
—		G.M. Kalgoorlie $1	25	6'67	Z03c	—	1.8
—		Haoma Gold N.L.	30	—	—	—	—
September		Hampton Areas 5p.	220xd	15.8	3.5	2.8	2.3

OILS

OVERSEAS TRADERS

TINS

COPPER

MISCELLANEOUS

RUBBERS AND SISALS

GOLDS EX-$ PREMIUM

London quotations for selected South African gold mining shares in U.S. currency excluding the investment dollar premium. These prices are available only to non-UK residents.

Feb.	Aug.	Buffels R1	$16½	2.1	Q200c	♦	14.7
Aug.	Feb.	East Drie R1	$12¾	2.7	†Q115c	1.6	10.9
Aug.	Feb.	East Rand Prp. R1	962c	2.7	†Q10c	—	1.3
June	Dec.	F.S. Geduld 50c	$27¾	30.10	†Q315c	2.4	13.8
June	Dec.	Pres. Brand 50c	$18⅞	30.10	†Q150c	3.2	9.6
May	Nov.	St. Helena R1	$17⅞	26.3	†Q190c	1.8	13.2
Aug.	Feb.	Stilfontein 50c	710c	2.1	†Q66c	1.7	11.2
Aug.	Feb.	Vaal Reefs 50c	$32	29.1	†Q280c	2.7	11.1
Feb.	Aug.	West Drie R1	$46½	2.7	Q615c	♦	16.0
June	Dec.	West Hldgs. 50c	$33	2.5	†Q415c	1.4	15.2
Feb.	Aug.	Western Deep R2	$15¼	29.1	†Q157½c	2.1	12.5

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on the basis of net distribution; bracketed figures indicate 10 per cent. or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent. and allow for value of declared distributions and rights. Securities with denominations other than sterling or in ECC currencies are quoted inclusive of the investment dollar premium.

- Δ Sterling denominated securities which include investment dollar premium.
- ● "Tap" Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ♦ Figures or report awaited.
- †† Unlisted security.
- ¤ Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividends or forecasts.
- ♠ Merger bid or reorganisation in progress.
- ♣ Not comparable.
- ♣ Same interim: reduced final and/or reduced earnings indicated.
- ♦ Forecast dividend: cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ♦ Regional price.
- ‖ No par value.

a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1979-80. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1978-79. K Figures based on prospectus or other official estimates for 1978. M Dividend and yield based on prospectus or other official estimates for 1978. N Dividend and yield based on prospectus or other official estimates for 1979. P Figures based on prospectus or other official estimates for 1978-79. Q Gross. T Figures assumed. Z Dividend total to date. §§ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

"Recent Issues" and "Rights" Page 13

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REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

OPTIONS

3-month Call Rates

MOTORS, AIRCRAFT TRADES

LEISURE

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

PROPERTY

INSURANCE

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCOS

TRUSTS, FINANCE, LAND

TEAS

MINES

CENTRAL RAND

EASTERN RAND

FAR WEST RAND

O.F.S.

FINANCE

DIAMOND AND PLATINUM

CENTRAL AFRICAN

FINANCIAL TIMES

Monday August 20 1979

Israel-U.S. near open breach

BY DAVID LENNON IN TEL AVIV

ISRAEL AND the United States appeared yesterday to be close to an open breach on the question of rights for the Palestinians on the West Bank.

There were suggestions in Tel Aviv that the tension might be eased only through a meeting between President Carter and Mr. Menahem Begin, the Israeli Prime Minister, possibly with the participation of President Anwar Sadat of Egypt.

The Israeli Cabinet yesterday backed Mr. Begin's rejection of any American attempt to introduce a new resolution in the United Nations recognising Palestinian rights.

Mr. Robert Strauss, President Carter's Middle East envoy, failed to budge Israel on the issue in a second meeting with Mr. Begin last night.

Mr. Strauss arrived in Tel Aviv earlier from talks with Mr. Sadat in Cairo, apparently having met a cool reception to the U.S. proposal.

After two hours of apparently tough talks here, Mr. Strauss refused to make any reference to Israeli threats to quit the current Palestinian autonomy talks if the U.S. tabled its own resolution or backed any other resolution to give more recognition to Palestinian rights.

Mr. Strauss said that the reservations voiced by both Israel and Egypt would be taken into consideration when Washington makes its decision.

Mr. Strauss met Mr. Begin and other Ministers on Friday before going to Cairo for talks with Egyptian leaders.

Tripartite working sub-committees resumed discussions on Palestinian self-rule yesterday, but the talks in Alexandria were expected to make little substantive progress.

It is because of the slow progress in these talks, which have concentrated on procedural issues, that the Americans are in favour of a new UN resolution.

Washington hopes that giving greater recognition to Palestinian rights will bring some Palestinians into the talks on their future.

However, Israel is bitterly opposed to any tampering with the delicate balance of Resolution 242 and the Camp David accords which together form the basis for the peace treaty with Egypt.

Officials here are saying privately that if the U.S. pushes ahead with its plan, in spite of Israeli opposition, then Jerusalem will consider the basis of the peace accords to have been breached.

This could mean an Israeli withdrawal from the self-rule talks.

Alan Mackie reports from Cairo: Egyptian Premier Mustafa Khalil said Mr. Strauss's delegation presented no plans to modify Resolution 242 but Vice-President Hosni Mubarak, who held separate talks with Mr. Strauss, said the matter had been discussed. Neither President Sadat nor Mr. Strauss alluded to the plan at a Press conoference.

However, both Mr. Sadat and Dr. Khalil have intimated that PLO involvement at this stage may hinder rather than advance the complex autonomy talks.

David Buchan in Washington writes: The present American policy of ostracising the Palestine Liberation Organisation was "ridiculous," said Mr. Andrew Young, the U.S. Ambassador to the United Nations whose resignation was announced last week.

He said it no longer made sense for the U.S. to refuse to talk to the PLO, when there was a possibility that the PLO might moderate its stand and come to recognise Israel's right to exist.

Phillips plans T-block oil scheme

BY RAY DAFTER, ENERGY EDITOR

THE PHILLIPS offshore consortium is preparing the way for the development of three neighbouring oilfields in the North Sea's UK sector.

If the work goes ahead—the decision has still to be taken—it could result in one of the most ambitious oil and gas production systems so far tackled in British waters.

The fields concerned are Tiffany, Toni and Thelma, in the so-called "T-block," 16/17, some 150 miles north-east of Aberdeen.

So far eight wells have been drilled in the block. The group already has a fairly good idea about the geology of Toni. Two more wells, one each on Tiffany and Thelma, are scheduled to be sunk later this year followed by a further well on each next year.

The wells are used primarily to appraise the extent and potential recoverable reserves of the two fields. If the drilling is successful the wells will be used later to produce oil and gas from the surrounding portions of the reservoirs.

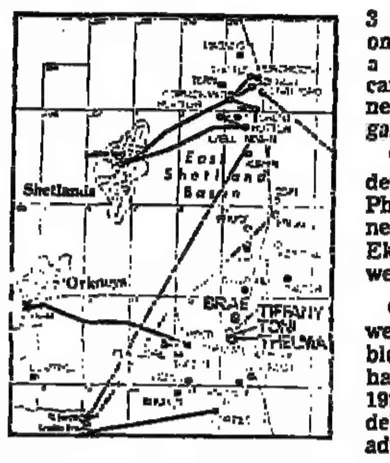
To aid this programme, Phillips and its partners—Petrofina, Agip, Century Power and Light, and Oil Exploration (Holdings)—have ordered drilling frames to be placed on the seabed above the Tiffany and Thelma fields.

These small steel templates, fabricated in Aberdeen by Vetco Offshore, are due to be delivered in time for the sinking of the first two wells.

Phillips, as operator for the group, has said nothing about the possible size of reserves in block 16/17. It is estimated that the group has identified over 500m barrels of recoverable oil, together with a large amount of natural gas.

Some analysts have put the potential much higher; stockbrokers Gilbert Elliott and Company suggest that over 1bn barrels of recoverable oil and one trillion (million, million) cubic feet of gas have been discovered.

Much will depend on the real extent of the fields. Tiffany is known to have a very thick oil-producing zone—a gross thickness of 1,300 ft from which oil flowed at rates of between 2,300 and 8,300 barrels a day. It is significant that the two appraisal wells planned for Tiffany will



be sited about one mile away from the discovery well, drilled earlier this summer.

Within the consortium, companies are already tentatively looking at possible development schemes, any of which would cost well over $1bn, to cover the exploitation of all three fields.

It is expected that three production structures will be used; one each for Tiffany, Toni, which lies 4 miles to the south, and Thelma, lying a further 3 miles to the south. At least one platform will have to be a fixed structure in order to carry the producing equipment needed to handle both oil and gas.

The group may decide to develop the fields in stages, as Phillips built up the production network from fields around Ekofisk in the orth Sea's Norwegian sector.

On this basis, Tiffany could well be the first of the "T-block" trio to be exploited, perhaps coming on stream in 1983-1984. Although far from delineated, Tiffany has one advantage over the other two; a lower quantity of associated gas. Any development scheme for Toni and Thelma would almost certainly have to have some provision for collecting and transporting such gas ashore.

The Phillips group is watching with interest Mobil and British Gas Corporation studies into a possible gas gathering pipeline which could link fields like Toni and Thelma to the British Gas terminal at St. Fergus, Scotland.

Brussels expenses rules change sought

By Jonathan Carr in Bonn

THE European Community's auditing office wants clearer rules established for expenditure by the top men at the Brussels Commission. It also notes that other Community bodies may need firmer expenditure guidelines.

This is the main outcome of a report prepared for the European Parliament by the auditors following a detailed examination of Commission expenditure in 1977 and 1978. The Parliament will have the report next month, but the full text has emerged in Bonn.

The auditors say that they have made criticisms only where firm rules have clearly been overstepped. But they also note that few rules on entertainment and travel expenditure exist anyway.

On one key point involving so-called "representational expenses"—that is meals, receptions, gifts, etc.—the report say a normal audit is hard if not impossible to carry out, because there are no rules saying what expenses can be drawn from general funds and what must be booked to individual commissioners.

The report says that in 1978 Mr. Roy Jenkins, the Commission President, and his 12 Commissioners, had individual representation allowances amounting in all to 9.1m. Belgian francs (£140,000) (compared with allowances totalling 7.8m Belgian francs in 1977).

Four commissioners overspent their 1978 individual allotments, others underspent so that the 13 together were booked for 8.98m francs. Also, a global sum of 2.3m francs is recorded for entertainment by the Commission as a whole (926,000 francs of it for restaurant meals) bringing a grand total of 11.3m francs.

The report notes that business travel costs totalled 30.3m francs last year and that travel "expenses totalling 3.5m francs, spent in 1978, were incorrectly put down under 1979."

It says that the Commission's own regulations on use of air taxis (small aircraft for taking Commissioners, for example, from Brussels to Community meetings in Luxembourg) were not always observed and the relatively high expenditure here was not always justified.

THE LEX COLUMN

Changing outlook for aluminium

European stocks of primary aluminium producers are currently at rock bottom levels. Last week, a leading German producer was asking its main competitors to let it have stock, and getting no help. Today, Pechiney Ugine Kuhlmann is pushing up its prices by 6 per cent. Vereinigte Aluminium-Werke, which made heavy trading losses last year, now says that capacity is insufficient to meet demand and that it is currently operating in the black.

Despite this, producers are today rather more cautious about the medium-term outlook than they were at the start of the year. And last week's interim figures for the two quoted UK companies showed that there is going to be no profits bonanza for them.

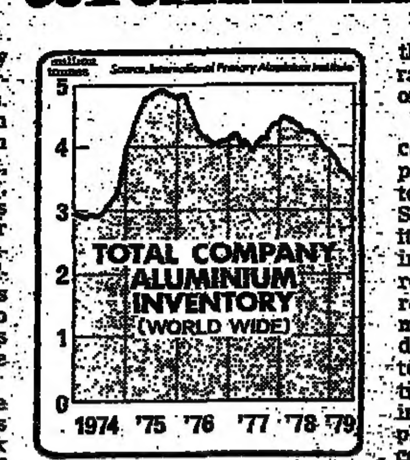
The current shortage of aluminium supply is a direct result of over-expansion in the 1950s and 1960s when the U.S. industry, for example, expanded its capacity eightfold. Companies burnt their fingers so badly in the aftermath of that splurge that for the last several years smelting capacity has been rising at a much slower pace than the demand for primary metal. In addition, soaring fuel costs have left an extra dent on the supply side—about a third of Japan's refining capacity is currently mothballed—while a strike at Alcan Canada's Quebec smelters has taken out the equivalent of nearly a tenth of the North American market.

Recession

Yet a looming recession is causing the producers to modify ideas about the possibility of a severe world-wide shortage of aluminium developing in the early 1980s. Companies such as Pechiney are still projecting an average 5 per cent rise in annual aluminium consumption over the next five years, which is perhaps two points higher than the potential increase in refining capacity. But the next 18 months could well leave a blip in that smooth growth pattern.

Thus Aluminium Company of America last week accompanied a forecast of record sales and earnings in 1979 with the indication that shipments could be essentially flat in 1980. And Alcoa could be better placed than some. Alcan (UK) on Friday reported lower interim figures and was hesitant about the outlook for the rest of the year. The early part of 1980, it thinks, will probably be a difficult period for producers around the world.

Looking a little further ahead, current investment plans suggest a rather faster rate of



growth in the world's refining capacity by the mid-1980s. The companies are currently flocking to Australia, which offers political stability, cheap coal and plenty of raw materials. Six separate smelter projects are at various stages of planning in Australia and more could follow.

Growth in smelting capacity in the UK will be strictly limited, for it would take big subsidies from the taxpayer to offset the high cost of fuel. Yet there will be quite heavy spending on modernisation and improved efficiency. British Aluminium, for instance, will probably in the near future authorise plans to reconstruct its Fort William plant at a cost of perhaps £25m. The companies expect that supplies may be quite tight in the early 1980s and they are investing big sums in their downstream facilities so that they will be able to add more value to the primary product. At the same time importers have grabbed a big slice of commodity-type business — their share of the UK market for rolled products rose from a third to about two-fifths last year.

In profit terms, the two quoted UK companies expect that the current six months will show some improvement on a strike-hit first half. But British Aluminium, which was probably the most profitable aluminium company in Europe last year, will be pushed to match its overall 1978 outturn of £25.1m this time round. And Alcan (UK) is not likely to match 1978's £11m pre-tax. In current cost terms, it is now making a sizeable loss, which explains why its shares yield roughly two-fifths more than its rival's.

The outlook for 1980 is not especially inspiring for either company. But they are both hopeful about their potential profits on a longer view. Alcan (UK), in particular ought to have scope to beef up its returns, which are way below those of British Aluminium—a rather smaller company in term of assets and sales.

Alcan has to carry financ costs for a heavy investmen programme, which should sta to pay off in the next few year Smoother production flows its Lynmouth smelter plus a increase in the inadequa returns produced by its ma rolling mill would togeth make the numbers look ve different. By 1982 Alcan hop to be getting close to its obje tive of a 10 per cent pr interest return on assets em ployed, calculated on a curre cost basis. This implies belief that a very substanti improvement in its current pe formance is feasible.

Hanson/Lindustries

In many takeover battles th initial offer is just a sightin shot. But Hanson Trust's £25 bid for Lindustries does not f this pattern. Hanson has offere 135p per share for Lindustrie (a 17 per cent premium on th pre-bid price) and has state quite firmly that it has "no in tention of increasing it." Unde the Takeover Panel rules th would seem to be a bindin statement. Lindustries share are currently 6p above th offer price although Hanson wa able to pick up 1.6m shares i the market last week taking it stake to nearly 15 per cent.

This is not the first tim Hanson has sniffed aroun Lindustries. In October, 197 it offered 135p per share co ditional on Lindustries' agre ment. That was refuse Lindustries doubled its div dend, and Hanson retired. Thi time Hanson is being mor aggressive. Lindustries recen record is unimpressive and it profits could fall this yea judging by the chairman' gloomy statement at the recen annual meeting.

But Hanson's bid still doe not look particularly generous It values Lindustries at fiv times historic stated earning (the multiple rises to 7.8 on fully taxed basis) and has bee pitched nearly a third below n asset value. Having raised i dividend so substantially la time round, Lindustries ha little scope for doing muc more on this side (the dividen is uncovered on a current co basis) but it may well publis a hefty property revaluation.

Shareholders still need som pretty firm assurances from th Lindustries board about the ou look for profits and dividend At the offer price the share yield 10½ per cent and ther are plenty of safer high yiel ing stocks around these day

Vote may threaten Callaghan

By Christian Tyler, Labour Editor

MR. JAMES CALLAGHAN'S hopes of preventing controversial amendments to the Labour Party's constitution from being decided at the annual conference might be thwarted by the trade union vote.

In spite of general sympathy among the union hierarchy for Mr. Callaghan's fear of a bruising public debate, many union leaders believe that the debate cannot and should not be sidestepped.

A decision on compulsory re-selection of Labour's Parliamentary candidates, including sitting MPs, is seen by some union officials as virtually certain.

The fate of other proposals, notably that giving the party's national executive committee final control over the manifesto, might depend on a meeting of trade union general secretaries on the eve of the Trades Union Congress in Blackpool in a fortnight.

Immediately after Congress, the nine unions that have called for the reopening of the inquiry into the party's structure and finances will meet the organisation committee of the national executive.

That is to discuss how the year-long inquiry should proceed. Leaders of the big unions have yet to decide what guidance to give their delegations to the Labour conference in October.

Mr. Callaghan, as leader of the Parliamentary Labour Party, has appealed to the national executive to change its mind and put all the issues into a revamped committee of inquiry. He has asked the unions to support him.

The Transport Workers, with the biggest block vote of the conference, appears anxious to have the issues brought into the open this year rather than postponed until next.

Mr. Moss Evans, general secretary, is one of the nine union leaders who have supported a thorough inquiry, but his executive and delegation may insist on a vote, at least on compulsory reselection.

The battle for the votes of the Amalgamated Union of Engineering Workers, which tipped the scales last year, might be close.

Unions seek tougher TUC line

BY CHRISTIAN TYLER, LABOUR EDITOR

LEFT-WING trades unions are seeking to convert the TUC's propaganda campaign against the Government's economic policies into action. They will urge delegates to the Trades Union Congress in two weeks' time to escalate the protest to include marches and other demonstrations.

Amendments to congress motions published today show there has been a considerable hardening of the unions' mood in the wake of Ministers' decisions on public spending, jobs and public ownership.

Mass demonstrations around the country are called for by the Furniture, Timber and Allied Trades Union in an amendment to the TUC General Council's key motion for the economic debate. The Association of Scientific, Technical and Managerial Staffs wants the TUC to organise a national day of action "as soon as possible" in protest at expenditure cuts.

Even the Right-wing led engineering section of the Amalgamated Union of Engineering Workers, which has already submitted a hard-line motion on free collective bargaining, has asked for a "national campaign" to secure a 35-hour week for manual workers.

The traditional defender of incomes policy at congress, the National and Local Government Officers' Association, this year qualifies its stance by agreeing that there should be free bargaining "until such time as the possibilities arise for a planned economy."

Another moderate union, the Iron and Steel Trades Confederation, wants to change an Electricians' motion on economic policy so that policy talks are held not with Government, but with the Labour Party.

An attempt by the Construction Workers to pull the TUC out of talks with Ministers on their plans for labour law changes is being obliquely contested by the Transport Workers, which suggests vigorous resistance instead.

This year's congress, in Blackpool, is likely to see broad unanimity against the major items of Conservative policy—although an argument about nuclear power could develop—but agenda suggests that the usual crop of domestic disagreements can be expected.

Tax changes in next Budget

BY ELINOR GOODMAN, LOBBY STAFF

THE GOVERNMENT'S review of personal and capital taxation should be finished in time to announce significant changes in next year's Budget.

If all goes according to plan, the Chancellor *should* be able to use the Budget to clarify a number of points now surrounded by uncertainty, such as the Government's position on inflation accounting and the general question of stock relief. He may also say how he intends changing aspects of personal taxation, like the treatment of fringe benefits.

As a result, next year's Finance Bill is likely to be a much more wide-ranging piece of legislation than this year's Act which affected the rates, rather than the structure of taxation.

The weekend reaction to what may well be a series of consultative documents on tax changes suggests that the Government may face considerable opposition to some of its proposals. Mr. Terry Duffy, the Engineering Union President, warned that the unions might react violently to Government plans for a crackdown on perks

The consultative process just begun on fringe benefits is one of a number of studies into aspects of both personal and corporate taxation being carried out by the Treasury. Even more fundamental in its impact could be the review of company tax, foreshadowed by Sir Geoffrey Howe, the Chancellor, in his June Budget speech, when he indicated that the Government would be considering the whole question of inflation accounting and company taxation and that the Inland Revenue would consult the accountancy profession.

The review of corporation tax, and the treatment of stock relief, starts from the basic premise that the present way of dealing with stock appreciation—introduced in 1974 as a temporary measure—is unsatisfactory.

Continued from Page 1

Engineering employers sceptical

large number of cases.

"Nevertheless, the federation believes that the willingness of unions and their members reasonably to operate this more limited amendment should be tested."

The code of conduct on picketing suggested by the Government was welcome, but should be drawn up by the Employment Secretary and Home Office, not by the Advisory Conciliation and Arbitration Service.

On the closed shop the federation says it has no policy of favouring the practice, but takes a "pragmatic" line.

Federation members had usually been able to secure reasonable safeguards for existing employees who refused to join a union

A key passage in the document says: "The federation has thus tended to regard the admitted problems associated with the close dshop as generally susceptible to industrial relations solutions rather than for legal determination. This accounts for the federation's reserved approach to some of the proposals."

First, protection should be given to those who objected to joining any trade union, not those who objected to a particular union. This was essential, the federation said, if "excessive litigation, inter-union conflict and industrial relations difficulties" were to be avoided.

Second, engineering employers would not support the proposal for compulsory closed-shop ballots. That would restrict employers' freedom to grant or withhold recognition of closed shops. Compulsory ballots would also step up union recruitment pressure.

● The third one-day, strike by engineering workers against the employers' offer on minimum rates is due today. An employers' spokesman said yesterday there were signs that the strikers' enthusiasm was waning. This follows a management decision for one-day lay-offs to allow maintenance work.

Weather

UK TO-DAY

DRY AND BRIGHT, becoming cloudy with rain.

London, S and N England, E Anglia, Midlands, Channel Is.

Mainly dry with bright or sunny intervals, becoming cloudy with rain. Wind light, becoming strong. Max. 17C (63F).

S. W. England, South Wales

Coludy with heavy rain, clearer later with scattered showers. Wind fresh or strong. Max. 17C (63F).

N. Wales, N.W. England, Lakes, S.W. Scotland

Cloudy with rain at times becoming clearer with showers. Max. 17C (63F).

N. E. England, Borders

Bright or sunny intervals, becoming cloudy with rain at times. Max. 16C (61F).

E. Scotland, Highlands, Ulster

Sunny intervals and scattered showers. Wind light and variable. Max. 15C (59F).

Outlook: Showers and bright intervals.

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Ajaccio	R	20	68	Locarno	F	20	68
Algiers	F	25	77	London	C	17	63
Amsdm.	F	18	64	Los Ang.	C	25	77
Athens	S	28	82	Luxmbg.	F	21	70
Bahrain	F	31	88	Luxor	S	40	104
Barclna.	S	27	81	Madrid	S	23	73
Beirut	S	29	84	Majorca	F	25	75
Belfast	C	16	61	Malaga	S	27	81
Belgrd.	F	22	72	Malta	F	29	84
Berlin	S	25	77	M'chstr.	C	16	61
Biarritz	C	19	66	Milan	C	20	68
Bmghm.	C	17	63	Moscow	F	24	75
Blackpl.	C	15	59	Munich	F	19	66
Bordx.	C	19	66	Naples	C	22	72
Boulgn.	C	18	64	Nwcstl.	C	18	64
Bristol	C	16	61	N. York	C	20	68
Brussels	F	19	66	Nice	F	22	72
Budpst.	C	19	66	Nicosia	F	34	93
B. Aires	F	25	77	Oporto	S	24	75
Cairo	F	36	97	Oslo	F	22	72
Cardiff	C	15	59	Paris	F	20	68
Cas'b'ca	S	25	77	Perth	C	12	54
Chicago	C	26	79	Prague	S	23	73
Cologne	C	18	64	Reykjvk.	C	10	50
Cpnhgn.	F	22	72	Rhodes	F	29	84
Corfu	C	25	77	Rio J'o	C	31	88
Dbrvnk.	F	18	64	Rome	F	25	77
Ednbgh.	F	18	64	Salzbrg.	F	20	68
Faro	S	29	84	S F'cisco	F	17	63
Florence	F	23	73	Singapr.	F	32	90
Frankft.	S	23	73	Stckhm.	F	21	70
Funchal	S	24	75	Strasbg.	F	21	70
Geneva	C	19	66	Sydney	F	24	75
Gibrltr.	S	26	79	Tangier	S	30	86
Glasgow	S	19	66	Tehran	F	35	95
G'nsey	C	15	59	Tel Aviv	S	29	84
Helsinki	S	23	73	Tenerife	C	20	68
H. Kong	C	28	82	Tokyo	F	33	91
Innsbrk.	F	19	66	Toronto	F	24	75
Invrnss.	C	15	59	Tunis	F	26	79
I.o.M.	C	15	59	Valencia	F	26	79
Istanbul	S	31	88	Venice	R	18	64
Jersey	C	16	61	Vienna	F	22	72
L. Pims.	S	25	77	Warsaw	C	18	64
Lisbon	S	25	77	Zurich	F	19	66

C—Cloudy. F—Fair. Fg—Fog. R—Rain. S—Sunny. Sl—Sleet. Sn—Snow.

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